THE JOURNAL OF ACUPUNCTURE AND INTEGRATIVE MEDICINE
KAMPO, Research on Theory, Practice and Integration

Special Edition

KAIM

CURRENT KAMPO MEDICINE

INTERNATIONAL INSTITUTE OF HEALTH AND HUMAN SERVICES, BERKELEY

Volume 1, Special Edition • November 2005 ISSN: 1559-033X

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Features of each period, prominent persons, individual theories, celebrated books
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Theory, clinical style, research, application in the modern medical system

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Clinical Applications of Kampo Medicine
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Introduction of the production process of Kampo prescriptions illustrated with photographs

Quality Evaluation of Kampo Medical Extracts
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Medical Insurance in Japan
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The Journal of
Kampo, Acupuncture and
Integrative Medicine
(KAIM)

Research on Theory, Practice and Integration

PUBLISHER
Shuji Goto
International Institute of Health and
Human Services, Berkeley
2550 Shattuck Avenue, Berkeley
California 94704-2724, U.S.A.

Website: www.kaim.us
E-mail: info@kaim.us

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MISSION

To disseminate peer-reviewed information on the use of acupuncture and herbs, and integration with western medicine, based on research from an international perspective; thereby stimulating further research, application of documented therapeutic measures; and facilitating dialogue among health care practitioners worldwide.

Foreword
What is Kampo Medicine

Kampo medicine, practiced in Japan, is TCM which has been modified incorporating Japanese culture and proven scientific and medical knowledge. At first, Kampo medicine, which began as an imitation of China's TCM, was organized as a system in the 16th century. At this time, medicine of Ming-China was introduced and widely spread. After that, in the 17th to 18th centuries, the basic concept of TCM was already articulated in "Shang han lun" and "Chin gui yao liu". Individuals in Japan applied these treatments based on these classical prescriptions. This became a major force and helped establish a Japanese tradition. This tradition which experienced a decline due to political causes after 1868, remains today, even after the reconstruction period in the 1930's.

Kampo medicine, compared to Chinese TCM, does not differ only in theoretical interpretation, or use of prescriptions; but it also differs in the way it is incorporated within the medical system. First of all, this medicine is dealt with in the unitary medical system based on European Medicine. The second, is the fact that 148 kinds of traditional prescriptions processed in extraction are approved for medical insurance. This large number is due to the scientific study of Kampo medicine which helped develop new prescriptions.

In countries other than East Asia, TCM and its family are treated as complementary and alternate medicine (CAM). However in Japan, the idea is heterodox. While the Japanese medical system used today is based on European Medicine, Kampo Medicine, which supported Japanese health for over 1500 years, is neither European Medicine nor CAM. It is recognized as an independent form of medicine, unique to Japan.

As mentioned above, this issue refers to the current form of Japanese traditional medicine which has Chinese origins. Therefore we named this issue "Current Kampo Medicine". Kampo medicine differs from traditional Chinese medicine in other countries practicing this form of medicine. Kampo medicine has antecedents with Chinese history since the 18th century and now has begun to demonstrate its own configuration which is unique to Japan.

In a word, we use a few excellent prescriptions (in particular, prescriptions of "Shang han lun" and "Qin qui yao liu") for various disorders. It will be demonstrated that the accumulated experience of Kampo in Japan is different than TCM in other countries.

Our intent is to provide knowledge so that readers may understand the special role that Kampo medicine holds in the Japanese medical system. We hope the contents in this issue are useful for the understanding of Japanese Traditional Medicine and will promote its use in other countries.

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***Kampo Medicine**
Kampo's "kan (han)" means "Ancient China", and "po (fang)" means "technique". Translated in English, this means "Technique of Ancient China". This name was established in the 18th century when Dutch Medicine (called Rampo=Technique of Holland) was introduced in order to distinguish it from Kampo Medicine, and spread for general use.

History of Kampo Medicine

Hiromichi Yasui, Japan Institute of TCM

Kampo medicine is the descriptive term used in Japan for TCM (in a broad sense Kampo medicine refers to the entirety of traditional Chinese medicine practiced in Japan, and in a narrow sense specifically to herbal medicine). This form of medicine differs from the Chinese form of TCM and is characterized by many unique theories and therapies. It is necessary to review the 1500-year history since the introduction of this system into Japan and thereby illuminate the characteristics of Kampo medicine.

Introduction and imitation of Chinese medicine

Traditional Chinese medicine was brought to Japan in the 5th century via the Korean peninsula. At that time Japan maintained an extensive exchange with the Korean peninsula and immigrants from the peninsula (some Korean physicians had been invited to Japan) had provided the people of the ruling class in Japan with a certain degree of insight into Chinese medicine. From the end of the 6th century direct exchange with China started and by the 7th century the Japanese government sent scholars for foreign studies with their ambassadors to China in the Sui and Tang periods. Some studied the Chinese medicine before their return to Japan.

In 701 the government enacted laws (including items related to the medical system) modeled according to the Chinese system used in the Tang period. For the purpose of medical education a curriculum was established, where the textbooks included classics like the "Huang-Di Nei-Jing" (Yellow Emperors Classic of Internal Medicine), medical encyclopedias, textbooks of pharmacology, pulse diagnosis and the like. The duration required for the study of medicine was set at 6 years. This was a period of imitation during which almost no original contributions introduced by Japanese were observed, but in 984 the oldest Japanese medical encyclopedia, the "Ishinpo" was compiled (the contents of which are, however, mostly citations from Chinese medical textbooks).

This system of medical affairs served the ruling class of the government and functioned as long as the aristocracy controlled the government until the end of the 12th century. After the warrior class seized political power and moved the capital from Kyoto to Kamakura the system was perfunctorily handed down (this government is called the Kamakura Shogunate). Medicine was handed down in specialized families and in extremely confined conditions. Yet, during this period, Buddhism, concentrating on salvatational activities, suddenly flourished and people involved were looking for a new medicine, breaking free of the Kyoto medical community. The representative priest and physician of the time was Shozen Kajiwara (1266-1337), who wrote two large medical encyclopedias between 1302 and 1327. In these works an enormous amount of Chinese medical books are cited as references.

Early development

In the 15th century the second government of the warrior class, the Ashikaga Shogunate, placed great importance on trade with China of the Ming period and dispatched many trading vessels. Beside these there was a significant number of private vessels scuttling between China and Japan. While this led to the import of many Chinese articles, it simultaneously also increased the number of people visiting Japan. Moreover, since Buddhist priests and intellectuals had found an interest in medicine, the merchant vessels imported large quantities of medical references and drugs. Yet, during that time the trade partners of the Japanese were Chinese merchants and information pertaining to the capital, Beijing, was scarce. The imported medical books tended to be slightly biased. They did not represent the most advanced medicine of the Ming period, but the majority of the books were rather of the preceding Sung period. For this reason Japanese medicine adapted itself to that period.

This situation was changed by Dosan Manase (1507-1594) who was born in Kyoto. After studying in a Buddhist temple, he headed for the seat of learning in east Japan, the Ashikaga Gakko (Ashikaga school) for further studies (the Ashikaga school was introduced to the world in 1550 by Francisco de Xavier as the "largest and most famous general university in Japan").

Koga, located close to this school, was the seat of the Ashikaga Shogunate regional government in East Japan. In its vicinity lived excellent physicians together with many intellectuals. Manase studied first under physicians in charge of important government officials as well as priests who had returned from studying medicine in China and later the contemporarily most advanced medicine of the Ming period. Because he was exceedingly sagacious he understood almost all of the material. As a result he acquired a level of medical learning and skills that matched the physicians of the Ming dynasty.

Following his return to Kyoto in 1545 he applied this knowledge, referring to a large number of books, to create his own unique medical system. The fruit of his labor culminated in his main work, the "Keiteki Shu". The purpose of this compilation was to unify the process from diagnosis to therapy based on traditional medical theories. This structure resembles very closely the current form of TCM. A school building, the "Keiteki In", was erected in which the medical system he had founded was taught to students gathering there from all over the country. This system became the Japanese medical standard of the day and spread throughout the country.

During the latter half of the 16th century the power of the Ashikaga Shogunate declined, and in the course of

multiple civil wars over a period of several decades, the Tokugawa Shogunate was established in 1603. This government transferred the capital to Edo (present day Tokyo) in order to govern the country, divided the country into more than 200 small feudal domains and appointed feudal lords (daimyo) to rule those particular domains, while the shogun maintained a central authorative government. The government of the Emperor in Kyoto continued to exist as a government without any real powers to which perfunctory government officials were appointed. The same situation applied to medicine.

Each feudal domain had an administrative organization resembling that of the central government. Initially the medical system was not exceptional. During that period there had not yet been any attempts at state regulated educational systems, so that people who studied in private medical schools were free to open offices in the cities and establish their practice there. The leaders of the private schools had studied in Manase's school and most were excellent physicians.

Many of the private schools were found in Kyoto and Edo (present day Tokyo), so that students intending to study medicine gathered in these two cities. The publication of medical books gradually increased, and in addition, the classics and books of the Ming period, reprints and commentaries trying to render difficult medical issues easier to understand circulated. These various commentaries became very important for the tradition of Japanese Kampo medicine.

Following the late 16th century new situations arose between Japan and the continent. One of those events was the attempt of Hideyoshi Toyotomi, for a short period the supreme ruler of Japan, to invade the Korean peninsula. The invaders plundered cultural artifacts including medical books and technical experts (including physicians) throughout the various parts of the peninsula and brought them back to Japan. In particular, the experts on wood block printing made important contributions to the Japanese publishing business. Publication of medical books relied largely on the technical expertise of these people.

Another event occurring a little later was the downfall of the Ming dynasty. People being attacked by the Manchurians (of the later Qing period) fled to the south and a small minority of these people (approximately 20-30,000) sought refuge in Japan. Here they were accepted by the Tokugawa Shogunate newly formed in 1603. Among these people were excellent physicians who taught the Japanese the newest level of Chinese medicine of the day.

These two events greatly promoted during the 17th century the introduction and spread of the latest medical knowledge from China and the Korean peninsula to Japan.

As stated above, the conceptual world of Japan at the time regarded Confucian studies to be of highest priority and studies of Neo-Confucianism, as the conceptual basis of the Tokugawa Shogunate, were promoted (serious introduction of Neo-Confucianism to Japan occurred during the latter half of the 16th century). Yet, by the latter half of the 17th century, new trends were observed in this branch of learning. Some of the progressive scholars denied Neo-Confucianism and attempted to return to the original Confucian views. Thus, the classics of the Confucian area were no longer interpreted along the Neo-Confucian lines of thought, but the trend among these scholars was to interpret the classics according to their own views. This also influenced the practice of medicine, which always stood under the strong influence of conceptual Confucianism. That is why the medical original classic "Sho Kan Ron" (Shang han lun) was interpreted according to the views of the medical scholars and not according to the interpretations prevailing during the Ming period in the same way that the Confucianists emphasized Confucius's original texts. This led to the spread of a movement, placing the utmost importance on clinical applications.

One cannot disregard the extensive studies of the Chinese "Shang han lun". In China the "Zhung-Jing's Encyclopedia" of 1599 (this included the "Shang han lun" and "Jin gui yao liu") was published. Around this time research on the "Shang han lun" started. This boom soon caught fire in Japan and in 1659 the Japanese re-print of "Zhung-Jing's Encyclopedia" and a number of other classic texts were published. Moreover, during this period research scriptures dealing with the Chinese "Shang han lun" were brought to Japan, immediately receiving much attention and motivated many people to study this world.

The second trend motivated the Japanese physicians to emphasize the original medical text of the "Shang han lun". This was a characteristic Japanese event and this school of thought later was designated the "classic school" (Koho Ha). The origin of the classic school was the revival of ancient medical saints (medical arts) in modern times, but the actual manifestation varied with each individual and through the different periods.

Creative Period

While the physicians of the classic school studied the "Shang han lun", they criticized at the same time traditional medical theories. Later, these concepts formed the characteristics of this school. During the early period there were influential people among the members of this school, their problem awareness was based on the "Riki Nigen Ron" (Two Principle theory) of the Neo-Confucianism. They considered "qi" (spirit) to be more important than "li" (reason) and thus established theories emphasizing "yang qi" or the "movement of qi". These concepts received much attention as new hypotheses of physiology and pathology, but did not develop beyond that, so that there was little hope, as will be stated later, for the appearance of new theories.

The "Shang han lun" may have been considered by this school of thought as the one and only classic and gave rise to an enormous number of research books. The most outstanding methodologic characteristic of their study was that they tried to explain this classic through the rules it provided itself. Todo Yoshimasu (1702-1773) was the one person who promoted this methodology to its extreme limits. His appearance on the scene abruptly changed the form of Japanese Kampo medicine.

Yoshimasu gave his own experiences and the entries in the classic a lot of thought and came up with the concept that "all diseases arise from a single toxin" (Manbyo Ichidoku Setsu = single toxin hypothesis of diseases) and thus arrived at a view of pathology entirely new and different from the common one. Drugs were supposed to expel this toxin and he set forth that the prescriptions listed in "Shang han lun" and "Jin gui yao liu" were highly effective for this purpose. Although there was only one toxin, it could reach various different places, causing a multitude of different symptoms. Abdominal examination was given great importance as the one diagnostic method of choice to determine the location of the toxin. Abdominal examination is a uniquely Japanese examination procedure. Its origin reaches back to the 16th century and Todo Yoshimasu inheriting its tradition, relied for his use available prescriptions. Moreover, he insisted that "prescriptions were the most important thing in medicine" and studied how individual prescriptions could be used for the expulsion of the toxin.

For this purpose he temporarily broke up the "Shang han lun" and "Jin gui yao liu", reassembled them classified by drugs and termed this work "Ruiju Ho" or "Lei Shu Fang" (in Chinese). In this book the individual paragraphs are arranged according to prescriptions, which served to facilitate clear comprehension of the indications for each drug. This arrangement does not depend on traditional theories, but allowed one to administer appropriate treatment provided a set of symptoms could be identified. This "treatment system of specific prescriptions for specific symptom complexes" is called "prescription-symptom relation". Later this system continued to play an important role in the Japanese Kampo medical system.

Yoshimasu also tried to deduce a posteriori the action of the individual drugs from the entry text in the "Shang han lun". When regarding prescriptions containing several crude drugs he searched for shared meanings in the text pertaining to the indications, identified the actions of the individual drugs and detailed them in his book "Yakuchou" or "Yao Chang" (in Chinese). In this way he supported his theories with pharmacology.

The "single toxin hypothesis of diseases" hypothesis did not worry about the right qi, but concentrated solely on the presence of evil forces and his treatment was characterized by dispelling this evil. Yoshimasu's concepts gave rise to extensive discussion and quickly spread throughout Japan. This resulted after a short while in the collapse of the Manase school of medicine. However, while the single toxin hypothesis was one of the defining characteristics of Yoshimasu's medicine, it too gradually fell into disuse after his death and only the "prescription-symptom relation" was passed down to future generations.

The classic school of medicine was, as stated above, not uniform, but had several other special characteristics such as emphasizing the "Shang han lun", rejecting the traditional medical theories, and attempt to find treatment principles out of the "Shang han lun".

Eclectic Period

Until the early 18th century the theories of traditional medicine formed the roots of medicine, including the Manase school of basic theories, but were rejected by the advocates of the classic school. Instead speculation was given up and therapies that could be based entirely on directly verifiable things became the mainstream. Symptoms were minutely examined, symptom patterns identified and treatments administered matching those patterns. The physicians of the time founded their practices under these circumstances on their own personal experiences, experience based personal hypotheses and the integration of therapeutic methods from other fields (like folk medicines and blood letting) and practiced their own individual eclectic styles. The result was that from the later half of the 18th century until the early 19th century an abundance of experiences was accumulated using this method. These people were called eclectics.

During this time the completely rejected traditional medical concepts by Todo Yoshimasu again came into use because of their clinical necessity. The eight principles of yin-yang, exterior-interior, cold-heat, deficiency-excess, or greater yang disease, brighter yang disease and similar terms revived the six channel concepts of the "Shang han lun". Also, a child of Todo Yoshimasu, Nangai Yoshimasu, proposed the hypothesis that although there is only one toxin, this may superimpose on qi, blood or water and thereby cause the symptoms of disease. These technical terms appear on first sight to be the traditional medical terms used previously, but actually refer to completely different things. They possess almost no meaning related to physiology or pathology, but are instead characterized in that they are used simply as indices of classifications.

Also, during this period academic conflicts arose between Kyoto and the capital Edo (present day Tokyo).

The physicians of Kyoto placed their greatest emphasis on the epoch of the "Shang han lun" and frequently used prescriptions listed in this classic. A representative figure of the contemporary eclectics was Tokaku Wada (1742-1803) from Kyoto. He acquired the

skill to use a relatively small number of prescriptions (a few dozen) for their respective indications through experience and was very skillful in applying these prescriptions to various different pathologic conditions. Kinkei Nakagami (1744-1833) also came from Kyoto and classified therapies most suitable for individual diseases, not restricting himself to Chinese herbal medicine, but also successfully used folk medicines, acupuncture and moxibustion, blood letting, affusions, and the like, for the treatment of diseases.

Conversely, Kakuryo Katakura (1751-1822) from Edo had referred to Chinese medicine up to the Sung dynasty, fitting specific prescriptions to the various conditions, thus achieving excellent results. He is known to have performed in 1794 the world's first resection of a nasal polyp with a snare.

In the latter half of the 18th century new trends appeared in Confuscianism and the study of historical artifacts flourishing in China of the Qing period was introduced to Japan. Medicine too came under the influence of this trend and the study of historical artifacts began to flourish in Japan. Classic texts like the "Huang-Di Nei-Jing" and "Shang han lun" were subject to strict criticism, which led to the preparation and publication of the correct texts. These movements were initially propagated by individual persons, but later also acknowledged by the Tokugawa Shogunate that established a national medical research institute (Edo Medical House). Here research and education were performed simultaneously. The third director of the institute, Genkan Taki (1754-1810), has left the world many great achievements. Among these his comments on the most important classic texts of traditional Chinese medicine "Huang-Di Nei-Jing", "Shang han lun" and "Jin gui yao liu" are of particular excellence. Later, while the institute was responsible for a portion of medical administration, the Taki family made remarkable achievements in the study of historical artifacts. The result was that the study of historical artifacts became the mainstream academic trend in Edo.

The serious introduction of western scientific medicine presented in Dutch to Japan began in the 19th century. In the middle part of the 18th century, during the period of Yoshimasu's activity, the gradual introduction of western medicine had already begun. While few in number, some medical books of highly advanced content had been imported and progressively minded physicians studied and translated these. The first translation of such a book was the "Ontleedkundige Tafelen" by the German Johan Adam Kulmus. This edition expanded the view of the Japanese, who had previously known only traditional Chinese medicine. All of a sudden a view of European trends was available.

Initially only anatomy and surgery in western medicine were introduced and started to gain ground, but soon internal medicine and other clinical applications started to spread. In particular a form of integrative medicine was practiced in the field of surgery. The representative person of this era, Hanaoka Seishu, resected in 1805 a breast cancer under the world's first general anaesthesia. Moreover, nearing the end of the Shogunate, western scientific medicine gained a lot more momentum, so that a western medical doctor was assigned as the physician responsible for the Shogun. A demonstration of this medicine's effectiveness in form of smallpox vaccinations made clear that Kampo medicine was not necessarily any longer the only form of medicine. The Meiji government later succeeded in adopting German medicine, because Japan had shown that it had been able to assimilate and apply western medicine of the highest level worldwide.

The ranks of Kampo physicians working in the field of internal medicine having difficulties in integrating both medical systems according to Hanaoka's approach, assumed a hostile attitude toward western medicine and tried to reject it. But their attempt at opposing the trends of the time failed and western medicine spread still further, leading to the feared decline of Kampo medicine.

Under these circumstances, many physicians believing in the superiority of Kampo medicine, appeared and tried to develop it further. At that time many physicians conducted their clinical practice along the lines of Yoshimasu's concepts and among these Yodo Odai (1799-1870) practiced a consequent Yoshimasu style medicine and became renowned for his excellent treatment. He added his personal experiences in the form of comments to Yoshimasu's "Ruiju Ho" and published his own book "Ruiju Ho Kogi". His book detailed explicitly how the prescriptions of the "Shang han lun" should be applied to the various pathologic conditions (The "Ruiju Ho Kogi" was a popular piece of reading during the renaissance of Kampo medicine in the 1930s and developed into a clinical guide. Its influence continues to the present day).

Gyoko Yamada (1808-1881) was one of the clinicians contributing to actual clinical practice. He was an outstanding personality who also had an academic side that led to his assignment as a teacher at the Edo medical research institute. He integrated the study of historical artifacts in clinical practice and applied past clinical descriptions and case reports into present clinical practice.

Another remarkable person was Sohaku Asada (1815-1894). He established a unique system based mainly on the "Shang han lun" and the medical theories of the Sung period. He was entrusted with important posts by the Tokugawa Shogunate and the new Meiji government. He is also known for having treated many important government officials and ministers of many foreign countries. His medical system was a broad-based

system combining the Kyoto and Edo schools and he is also well known for episodes describing his dealing with a sciatica attack in the French envoy, Leon Roche; or inducing recovery in the Taisho Emperor during a critical illness in his infancy.

While Kampo medicine developed, it divided into various coexisting schools by the middle of the 19th century. The study of historical documents achieved an unprecedented development. Before this background clinical experiences were accumulated in a preparatory step for further development. Yet, these trends came to a sudden standstill, as outlined in further detail below, because of changes in the political environment.

Decline and Revival

Until the middle of the 19th century Kampo medicine made enormous contributions to the health of ordinary people. During this time there was both technical progress and academic development. Yet, when the new Meiji government (where the emperor again assumed the highest position in a constitutional monarchy) replaced the Tokugawa Shogunate in 1868, the circumstances relevant to medicine changed completely.

The new government was modeled after the political systems of America and various other countries, establishing guidelines that westernized politics, economy, education, military and various other institutions. While it suffered from unequal treaties with America and various other countries, it initiated a build-up of national strength according to the motto “national prosperity and defense”.

Regarding medicine, there was a need for military medicine and for that purpose it was decided to adopt the most advanced German medical system. German medical educators were invited and highly advanced, specialized education started at the universities. All medical facilities of the former government were requisitioned by the new government or else abolished. After that, all practicing Kampo physicians had to terminate their profession in one generation (the profession of a physician was often hereditary) and regardless of how zealously their children or disciples practiced, they were not able to become physicians any longer.

People aspiring to become physicians were obliged to study western medicine at universities or specialized organizations and then pass an examination for practicing physicians. Although the curriculum did not include Kampo medicine, the people in charge of the relevant department at that time, did not reject Kampo medicine in itself. There was still room left to study traditional medicine after formally becoming a physician. This measure later led to the revival of Kampo medicine.

Kampo medicine was considered not to be proper medicine and as such banished from any official capacity. Social survival was permitted only for acupuncture and moxibustion with permission of the regional government (refer to the special edition of "Japanese Acupuncture" for further details). The research of the constituent crude drugs of Kampo prescriptions (pharmacognosy) was at the time the most advanced academic subject and enthusiastically conducted in pharmacologic faculties of universities. The isolation of ephedrine from the ephedra herb by Nagayoshi Nagai is just one such example. In this way the traditional Japanese pharmacology was inherited and led to modern scientific research in Kampo medicine.

Having received a major blow from the government, Kampo medicine was now completely removed from the mainstream of medicine. In spite of the opposing movement of actual Kampo medicine practitioners (this movement is in terms of medical history very intriguing), there was almost no reflection on this situation at all during the 1900s. However, the small number of physicians who studied by the end of the Tokugawa Shogunate under the few remaining Kampo physicians (most of which had degrees in western medicine) started new research into Kampo medicine and applied this clinically.

During this period the Kampo physicians could grossly be divided into three different groups.

The first group was the successors of Shuhaku Asada, who practiced by the end of the preceding century. They handed the medical teaching of their master down while practicing in Tokyo, Osaka, and Kyoto and these disciples in turn trained their own students in their devotion for further development. This school belonged to the so-called eclectics.

The second group were followers of Wada Keijuro, who himself still being a young boy, saw his sister radically improve through Kampo medicine and thus decided to become a Kampo physician himself, later making great efforts in his attempt at facilitating the development in this field of learning. In 1910 he published the book "Ikai no Tettsui" (The Iron Hammer of the Medical World) wherein he used western medicine as academic background. The book provides an outstanding description of Kampo medicine as a form of clinical medicine and by which he pioneered the social revival of Kampo medicine. The basic style of the book was the same as that of Todo Yoshimasu and based mainly on the "Shang han lun" and "Jin gui yao liu". He and his successors formed a group of people belonging to the classic school.

Third, was the group of followers of Dohaku Mori, who was also a religious figure with his disciples. Mori entered into an apprenticeship with a not famous, but a very capable Kampo physician, where he acquired his medical skills. Adding his own personal ideas he created a unique classification of physical constitutions and later instructed younger generations. His treatment was

outstanding and in 1918, during the so-called Spain influenza epidemic, he classified this disease into three types, assigned different prescriptions to these types and thereby achieved great therapeutic success. His school belonged to the Gosei Ha (new world school).

Second generation followers of these schools cooperated later in the 1930s to establish the Japanese Kampo medical system. The results of these efforts found their common expression in the book "Practice of Clinical Kampo Medicine" (1941). This book was prepared for the purpose of offering the "busy clinician the possibility of acquiring Kampo medical skills without any background knowledge". It later became the archetype of literature on Japanese Kampo medicine.

The methodology outlined in this book closely resembles that put forward by Todo Yoshimasu. Specific prescriptions were assigned for specific symptom complexes and the concept therefore followed the tradition of the "prescription-symptom relation" (fang zheng xiang dui) where the prescription matches the Kampo diagnosis. It may be said to have developed based on the hypothesis that "prescriptions are the most important thing in medicine".

The revived Kampo medicine followed the lines of medicine as it had been practiced during the Edo period. It promoted a form of treatment that put little emphasis on the pathologic factors and mechanisms at work in the patients and therefore facilitated its application within the framework of western medicine. Later this contributed both positively and negatively to the future development of Kampo medicine. Put in another way, this form of medicine could be put to practical use from that time onward, provided there was a basic background knowledge in western medicine. Doubtlessly this was very convenient for physicians who had received only a western medical education but would like to give the use of Kampo medicine a try.

Actually, the application of health insurance to the prescription of Kampo medical formulas was introduced in 1976 on this basis and later saw a surprising growth, thus supporting this methodology. Conversely, the loss of traditional ways of thinking obstructed theoretical developments. This became a major obstacle in academic exchanges with China and Korea and various other countries with the similar traditional medical systems (and theoretical systems) by creating major systematic differences.

Application of medical insurance to specific Kampo medical extracts

Currently, even though Kampo medicine is not taught in medical school, herbal medicines are sold in pharmacies and traditional prescriptions in use (many of which are manufactured by small scale, by family business type companies) are in use. Their constituents are actively studied as materials for new drugs. Furthermore, since the establishment of the Japanese health insurance system, health insurance currently covers more than 160 herbal formulas. While the policy of the Meiji government superficially had abolished Kampo medicine, it had survived among the people.

In 1976 the Ministry of Health and Welfare adapted the opinions from the chairman of the Japanese Medical Association, Taro Takemi who had a deep understanding of Kampo medicine, demonstrated strong political leadership, and made remarkable contributions to the medical administrative management of the Japanese government, which led to the approval of health insurance for Kampo medical prescriptions.

A number of pharmaceutical companies have started to manufacture these formulas. The sales strategies for these companies at the time were to use Kampo medicines based on names of diseases. Thus, while yin-yan, deficiency-excess and similar pathologic factors and mechanisms were largely neglected, identification of the symptom patterns called "Sho" was the only concept barely being accepted and used. This resulted in the use or large quantities of Chinese herbal extracts covered by health insurance in the clinical setting and a quick spread of these in the medical world.

These circumstances led to the appearance of a small number of physicians using Kampo medicine in a disorderly manner, yet did not entirely drive the development of Kampo medicine into an undesirable direction. A substantial amount of clinical research (including DB-RCT cumulative research) and pharmacologic research was conducted, also developing new applications and indications like relief of side effects of radiation therapy or chemotherapy. In this way a number of applications for a number of fields have been developed.

At the same time, limitations of this kind of application became evident. Already in the 1980s a number of problems had emerged. The first of which was the efficacy of Kampo medicine (extracts) for medical use. While the dose of Japanese Kampo prescriptions is quite small, the amount of extract contained in the extracts is even smaller. Regarding efficacy, this was reason why these formulas were thought of as possibly not being sufficiently effective. Following communication of this fact to the Ministry of Health and Welfare in 1985, the situation improved. However, the fact that the used doses were small, remained unchanged.

The second problem was that ready-made formulas could not be individually adjusted, preventing the prescriptions made to order for individual patients. To circumvent this problem a number of extracts were combined to provide a limited amount of freedom, yet this did not constitute a fundamental solution.

For the solution of this second problem a significant number of physicians adopted the original application form of these drugs, namely decoctions.

Thirdly, and this is the most important problem, limitations became clear, when Kampo medicines were prescribed according to western medical diagnoses and disease names instead of the original Kampo medical concepts.

A number of solutions to these problems have emerged.

The first of which was the reintroduction of a system similar to that used by the Japanese 400 years ago in modern traditional Chinese medicine (TCM). Because the traditional body concepts (anatomy, physiology, etc.) similar to those originally adopted by the Chinese and later used by the Japanese, had been replaced in a little over a century by western medical body concepts, comprehension of traditional TCM theories based on said traditional body concepts became almost impossible. This resulted in the necessity for physicians to relearn the TCM theories. A rather difficult undertaking. Even though identical Chinese characters are used in both systems, correct comprehension is currently quite difficult. A large number of relevant textbooks and references have been published.

Even though TCM has again become a subject of research among Japanese physicians, the Japanese have difficulties in grasping the abstract TCM theories, which makes a complete mastering of the subject difficult. Recently, Yoichiro Ebe developed a theory integrating these abstract theories with practical elements to facilitate their explanation. This theory is called "Keiho Igaku" (Classical formulation (jing fang) medicine) and assigns particular importance to the attempt at obtaining a detailed and concrete understanding of the functions of "qi" within the body.

Another problem is the adoption of modern medical research methods. In order to enable various practical clinical applications of Kampo medical extracts covered by the health insurance, cumulative research, including DB-RCT, have been performed and the formulations applied clinically based on these studies.

In this field the research into clinical epidemiology is particularly noteworthy. The research group of Hajime Haimoto examined more than 100 conditions for which patients received Kampo medicines, analyzed this data with a computer and calculated the odds ratio. One of the findings of their research particularly well known is that the use of *Poria Powder with Five Herbs* for headaches associated with a drop in atmospheric pressure carries a probability of being effective of more than 90% (see this journal, Vol. 1, No. 1).

In Japan, the study of galenicals has been a family tradition for more than 100 years. Application of modern methods in this field has led to further developments and now similar studies performed for Kampo medicines have yielded corresponding results. Studies trying to identify the components of crude drugs or formulas are in the limelight of recent attention. However, the new techniques trying to identify "compounds in serum", following the intake of Kampo herbal formulas, are the most significant with application of this so-called serum, Kampo pharmacology attempts to clarify the pharmacodynamics of the crude drug components in the body. It gradually becomes clear that the enteric bacterial flora apparently plays an important role in the absorption of these components.

In Japan, there is another research area that the country can pride itself with before the world, and this is research into medical history, classical texts and bibliography. In the first half of the 19th century the Edo Gakko (Edo Medical House) led research efforts in this area to a culmination point, but after the adoption of German medicine, it lost its necessity and rapidly declined. Yet, this area of research has in recent years seen a renaissance and Hiroshi Kosoto, et al. of the Department of Medical History Research at the Oriental Medicine Research Center of the Kitasato Institute have published a series of new research results. The research into medical history on first view does not appear to have any direct bearing on clinical practice, but it plays an important role in the establishment of the foundation of Kampo medicine. Also, critical text analysis often provides hints for new clinical applications.

From a clinical point of view, the most important feature of Japanese Kampo medicine is the extensive accumulation of experiences in the use of "Shang han lun" prescriptions (including the "Jin gui yao liu"). In the past, Japanese physicians have been using these for conditions that are basically indications for different prescriptions. This successfully contributed to the demonstration of the inherently great potential of these drugs, indicated new forms of clinical applications and has thus also provided material for further studies. Researchers of Japanese Kampo medicine work with the above described various different research methods and clinical applications, but agree with each other regarding the importance placed on the "Shang han lun" prescriptions. The achievements associated with this accumulation of experiences are both Japan's pride and asset.

In modern Japan, highly diverse forms of Kampo medicine coexist and their presence has a historical background.

Yet, this diversity represents the real nature of Japanese Kampo medicine and comprises new research methodologies and applications found only in Japan. Even though the future worldwide development of TCM is largely influenced by the prevailing trends in its birth place, China; Japanese Kampo medicine will contribute significantly to that development.

Distinctive Features of Kampo Medicine

There are varying styles of Japanese Kampo Medicine. Each derives its inherent characteristics from the Japanese, their culture, climate and history.

Japan began accepting Chinese Medicine in the 5th century. It utilized Ming-China's therapeutical system in the 16th century, but constructed a new system based on the "Shang han lun" from the late 17th century to the early 18th century. At this time a school providing treatment that was not based on the theory of traditional Medicine appeared. This school sought a principle of medicine in "Shang han lun" and did not utilize the Ming-China's system. From then on there was academic controversy between the group practicing Ming-China's Medicine and the group based on "Shang han lun". In addition, a group compromising both systems arose. Groups correcting and annotating medical textbooks arose, and as a result, Japan developed its own medical environment in which various views coexisted.

After the Meiji Restoration in 1868, Kampo Medicine, once ostracized politically during the reconstruction period starting in the 1930's, developed successfully in this environment. Medicine can be divided into "study" and "skill". One of the features of Japanese Kampo Medicine is that it has a strong tendency to be considered as "skill" and not "study". This tendency is especially remarkable in view of the compromising party which arose in the 18th century. Medicine is, of course, knowledge. The highest level to be achieved is mastering the skill followed by continued improvement gained through new knowledge and experience. It has something in common with the world of art or 'Zen'.

Having these aspects, Kampo Medicine is applied fairly pragmatically at bedside. For instance, Kampo medicine is specifically prescribed for specific diseases. That is, as to apply "Minor blue dragon decoction", of which its validness is checked by DB-RCT, for allergic rhinitis, or the use of "Ten Strong Tonic Herbs Decoction" in order to increase the immunity, reduce the side effects, and improve the QOL for patients who take chemotherapy, radiotherapy, or malignant tumor surgery. These are only some of the many uses of Kampo medicine.

Even in these pragmatic methods, Kampo medicine exists with its own unique styles of logic. These styles are various, such as the traditions from the Edo period, the recent TCM theory, or the utilization of clinical epidemiology.

1. Theory of Usage

Logic adopted in Kampo Medicine is varied as seen above. While one adopts the same logic as present day Chinese TCM, another may use prescriptions applying the results of an experimental study in modern medicine.

Yet, the most frequently employed method is the so-called "pattern corresponding prescription" system. This system was established approximately 200 years ago by Todo Yoshimasu and is based on the concept: "Regardless of what pathologic factors are at work, the form of body response constitutes the real nature of the disease". Basically, this system assumes that reliance on minute clinical observation allows to identify the relevant symptom complexes and thereby leads to the deduction of the required medication for each individual patient. The most important aspect of a TCM diagnosis, namely the disease stage (disease mechanism) is at that time treated as a sort of black box. This is one of the most distinguishing features of Japanese Kampo medicine. Since this system easily allows the integration of modern medical research results, it is extremely helpful for the spread of this medicine in Japan, where medicine is unified according to the western medical system.

Currently, in contrast to Yoshimasu's time, the implementation of this method employs several supplementary traditional medical concepts. The terminology of these concepts itself is almost identical with the relevant terms used in TCM. Yet, there are essential differences in their application. The terms are not used to identify the aforementioned pathologic mechanisms, but rather to classify the various diseases. This classification of diseases in turn decisively determines the most suitable prescription for the patients. The concepts used in this connection include the eight principles (yin-yang, interior-exterior, cold-heat and deficiency-excess), "Qi-Blood-Water" triad, the six channels according to the "Shang han lun" and the internal organ concept etc. Although the same terms are used in TCM, their respective meaning is not necessarily the same.

Terms from the Kampo medical point of view are presented below.

(1) Eight principles

The eight principles indicate the eight fundamental concepts of yin-yang, interior-exterior, cold-heat and deficiency-excess.

The terms yin and yang are used in daily life speech in Japan and thus do not have to be remembered, but some aspects of their usage differ from that in China. Medically, they have two different meanings. One expresses the general level of activity of the patient(s). Here there is no major difference to their meaning as it is used in TCM. The other aspect is a characteristic of Kampo medicine and serves to indicate the location of diseases based on the six channels according to the Shang han lun, where they are divided into greater yang, brighter yang, lesser yang disease stages or greater yin, lesser yin or reverting yin. The former are called "yang pattern" and the latter "yin pattern". The frequent use of prescriptions from the Shang han lun has a significant meaning. It is not necessarily common that the use yang implies yang Qi and yin be a representative for yin fluid as it is in TCM. Usually, a yin deficiency pattern represents a yin pattern combined with a deficiency pattern, whereas a yang deficiency pattern means a yang combined with a deficiency pattern.

The concept of interior-exterior expresses the depth of the disease and here there are no major differences with its use in TCM.

Cold-heat is a scale pertaining to temperature and expresses the true nature of the body as well as characteristics of diseases and crude drugs or prescriptions. Yoshimasu did not use this concept for his treatment, but expressions like shivering or fever are cold-heat related symptoms frequently encountered in daily clinical practice, so that in spite of Yoshimasu's intentions, they have been used comparatively frequently and are currently still in use.

Regarding deficiency-excess, there are several aspects and not just one concept. Usually, the terms are used to refer to the conditions of true and evil Qi within the body based on the reference in the first section of the classic "The Yellow Emperor's Classic of Internal Medicine" given as "when the evil Qi is flourishing, the essential Qi is lost and deficiency results". Following the introduction of TCM, the concept of deficiency-excess has remained bound to its traditional forms.

However, during the revival of Kampo medicine in the 1930s, researchers of the time proposed one more deficiency-excess concept. According to this concept, there is "deficiency, the weakening of physical resistance to disease with an excess, representing a condition of abundant physical resistance to disease. Generally, people of strong physical build present a state of excess, while asthenic people of frail body build present a state of deficiency." That means that deficiency and excess indicate a state of excess of deficiency of a certain vector and thus can be considered to represent the difference in physical constitution and strength. The background for this new interpretation in Japan lies with the two different elements ascribed to the characteristics of right and evil Qi respectively. When discussing the one index, "deficiency-excess", this seemed to be paradox and may partly be explained by the logical structures the Japanese used in general. Currently, this is accepted as the representative concept of deficiency-excess.

Later, Terasawa combined these two concepts in 1990 to propose a new concept of deficiency-excess. He suggested that "deficiency pathologic conditions (deficiency patterns) represent pathologic conditions for which only weakened Qi and blood forces can be mobilized against any possible distortions caused by external disruptive factors. Generally this occurs before a background of lowered whole body levels of Qi and blood. In excessive pathologic conditions (excess patterns) the external disruptive factors are very strong and the Qi and blood forces mobilized against these factors are also very vigorous. This condition generally develops before a background of heightened whole body levels of Qi and Blood." In this form the concept resembles the prevailing ideas used in TCM.

(2) Qi-Blood-Water

The concept of Qi (in Japanese Ki) is one of the foundations of traditional Chinese medicine. In Japan this concept is very important. There is a large number of expressions in everyday language pertaining to Qi.

Yet, about 250 years ago in Japan, Todo Yoshimasu discarded it based on the concept that it cannot be seen and there is no way of objectively proving its real existence. Since then a considerable number of physicians have forsaken the application of this concept in medicine. This trend became a new tradition in Kampo medicine and has been handed down to the present, but there are also schools that recognize the relevant concepts of those days and in recent times almost all modern physicians understand the concept of Qi.

Pathologic Qi conditions include Qi deficiency, Qi stasis, Qi reversal etc. and Terasawa has assigned scoring systems to these pathologic conditions.

◆ Diagnostic criteria for Qi deficiency (Terasawa)

Qi deficiency score			
Body feels heavy	10	Dull eyes and toneless voice	6
No energy	10	Tongue with pale white or red fur, hypertrophied	8
Tire easily	10	Weak pulse	8
Drowsiness during the day	6	Weak and soft abdominal wall	8
Loss of appetite	4	Symptoms of internal organ atonia[1)]	10
Catch cold easily	8	Subumbilical insensitivity[2)]	6
Be easily startled	4	Tendency toward diarrhea	4

Diagnostic criteria: A score of more than 30 points indicates Qi deficiency. Any clear manifestations of the parameters receives a full score, while half the score is given to mild cases.

Note 1: Symptoms of internal organ atonia refers to gastric atonia, kidney ptosis, uterine prolapse and anal prolapse.

Note 2: Subumbilical insensitivity refers to decreased muscle tone in the lower abdominal region.

◆ Diagnostic criteria for Qi stasis (Terasawa)

Qi stasis score			
Tendency toward stasis[1)]	18	Symptoms periodically get worse[2)]	8
Dull headache, sense of developing a cold	8	Difficulties getting up in the morning	8
Feeling of throat congestion	12	A lot of flatulence	6
Feeling of thoraci oppression	8	Belching	4
Feeling of stasis in the hypochondrium	8	Sensation of residual urine	4
Abdominal distention	8	Abdominal tympanicity	8

Diagnostic criteria: Any clear manifestations of the parameters receives a full score, while half the score is given to mild cases. A score of more than 30 points indicates Qi stasis.

Note 1: The severity of various symptoms, like a tendency toward stasis, refers to depressive moods, lack of interest, loss of appetite, food tasting unpleasantly like sand, is used for the evaluation.

Note 2: "Symptoms get worse over time" means that the chief complaint fluctuates.

◆ Diagnostic criteria for Qi reversal (Terasawa)

Qi reversal score			
Feeling hot in the upper half of the body and cold in the lower half[1]	14	Easily startled	6
Palpitation attacks	8	Attacks of restlessness	8
Paroxysmal headaches	8	Facial flushes	10
Vomitting (with little nausea)	8	Epiumbilical palpitation[2]	14
Cough associated with anger	10	Feeling of cold in the lower or all four extremities	4
Attacks of abdominal pain	6	Palmar and plantar sweating	4

Diagnostic criteria: Any clear manifestations of the parameters receives a full score, while half the score is given to mild cases. A score of more than 30 points indicates Qi reversal.

Note 1: This refers to a condition where the patient experiences heat in the upper half of the body and feels cold in the lower half of the body at the same time. The condition is triggered by entering a well air-conditioned room. This also receives 14 points.

Note 2: Epiumbilical palpitation refers to an increased pulsation of the abdominal aorta that is felt when touching the median abdominal wall lightly with the palm of the hand.

Pathologic conditions of blood include blood deficiency, Oketsu syndrome (which has the same meaning as "stagnation of blood") blood heat, blood cold, hemorrhage etc. The most important of these conditions in Japan is the Oketsu syndrome. These pathologic conditions can be observed in most chronic diseases and have been given particular importance in many gynecologic diseases. For Japanese trying to grasp all phenomena in concrete form this concept is extremely important, because the abdominal examination provides comparatively easily assessable information. Extensive basic and clinical research has been conducted regarding the Oketsu syndrome and even an "Oketsu Academic Society" has been established. Terasawa has created a scoring system for blood deficiency and Oketsu.

◆ Diagnostic criteria for blood deficiency (Terasawa)

Blood deficiency score			
Decreasing concentration ability	6	Poor complexion	10
Insomnia, sleep disorders	6	Head hair easily falling out[1]	8
Eyestrain	12	Dry skin, getting rough and chapped	14
Dizzyness	8	Anomalies of the nails[2]	8
Calf cramps	10	Disturbances of perception[3]	6
Oligomenorrhea, irregular menstruation	6	Stiffness of abdominal muscles	6

Diagnostic criteria: Any clear manifestations of the parameters receives a full score, while half the score is given to mild cases. A score of more than 30 points indicates blood deficiency.

Note 1: An abundance of dandruff would have the same meaning. This too receives 14 points.

Note 2: This refers to symptoms like brittle, easily splitting nails, roughening of the skin around the nail beds and the development of hangnails.

Note 3: Tingling or ticklish sensations resembling numbness, feeling like the presence of an added skin layer, loss of sensation etc.

◆ Diagnostic criteria for blood stasis (Terasawa)

Blood stasis score					
	Male	Female		Male	Female
Pigmentation of the eyelids	10	10	Periumbilical tenderness, left	5	5
Pigmentation of the face	2	2	Periumbilical tenderness, right	10	10
Dermal roughness and chapping[1]	2	5	Periumbilical tenderness, center	5	5
Darkening of the lips	2	2	Tenderness, resistance of the ileocecal region	5	2
Darkening of the gingivae	10	5	Tenderness, resistance of the sigmoid region	5	5
Tounge turning dark red or purple	10	10	Tenderness, resistance of the hypochondrium	5	5
Fine arteries[2]	5	5			
Subcutaneous extravastion	2	10	Hemorrhoids	10	5
Palmar erythema	2	5	Menstrual disorders		10

Diagnostic criteria: A score of less than 20 points indicates a pathology unrelated to blood stasis, a score of more than 21 points an blood stasis pathology, more than 40 points a severe blood stasis pathology. Any clear manifestations of the parameters receives a full score, while half the score is given to mild cases.

Note 1: Chapping skin, roughening, fissure formation.

Note 2:Dilatation of capillaries, arterial spiders etc.

Pathologic conditions of fluids include besides a lack thereof, an excess, asymmetrical distribution etc. also rheum produced by excessive metabolism, dampness, phlegm and similar pathologic substances. In Japan, pathologic conditions caused by excessive fluids, have their asymmetrical distribution or pathologic substances collectively called "water toxin (disorders of the body's fluid metabolism)" or "water stagnation". This term implies that stagnation of the flow of water has adverse effects on the body through individual metabolites of water or its entirety and as such as a very broad range of application. Terasawa has created a scoring system for water stagnation.

◆ Diagnostic criteria for water retention (Terasawa)

Water retention score			
Body feels heavy	3	Nausea, vomitting	3
Pulsating headache	6	Increased gurgling	3
Dull headache	3	Morning stiffness	7
Getting motion sickness easily	5	Tendency toward edema, gastric clapotage	15
Lightheadedness, dizziness	5		
Syncope	5	Pleural effusion, cardiac water retention, ascites	15
Watery nasal discharge	3		
Hypersialosis	3	Epiumbilical palpitation[1]	5
Foamy sputum	4	Watery diarrhea	5
		Decrease urinary volume	7
		Diuresis	5

Diagnostic criteria: A score of more than 13 points indicates water retention.

Note 1: Epiumbilical palpitation refers to an increased pulsation of the abdominal aorta that is felt during light massage of the umbilical area.

(3) Six channel classification of the "Shang han lun"

The "Shang han lun" has been recognized since the 18th century as an extremely important classic of Kampo medicine and many Japanese physicians believe that this book contains important treatment rules. The classification into six channels (greater yang, brighter yang, lesser yang, greater yin, lesser yin or reverting yin disease) represents a basic classification of disease stages, but each of the disease stages according to the Shang Han also indicates diseases in specific locations, so that it can also be called a classification into disease locations. Its acknowledgment in Kampo medicine is used to classify all diseases into disease locations for which suitable Kampo medicines are applied from among the prescriptions listed in the "Shang han lun". Not restricted to acute diseases these may also be applied to chronic diseases. For example, a condition like rheumatoid arthritis is classified as a greater yang disease location and is treated with *Two-parts Cinnamon Twig Decoction and One-part Maidservant from Yue Decoction*, whereas a disease like chronic hepatitis is classified as lesser yang location and thus treated with *Minor Bupleurum Decoction*.

(4) Concept of bowels and viscera

As with the other concepts, the concept of bowels and viscera is essential to Kampo medicine. However, Yoshimasu maintained the point of view that he "will not discuss things invisible". Later, discussions of pathologic conditions of the bowels and viscera ceased in Japan. Due to the influence of the reintroduction of TCM in recent years there has been a trend towards a revival.

2. The Clinical Practice

The medical treatment of Kampo Medicine is based on the tradition of TCM, and begins with the comprehension of the patients' conditions using four diagnostic methods. What differs most from the Chinese system is that it values abdominal diagnosis among four diagnosis methods. This clinical system developed gradually from the 16th century, and nearly established its present prototype in the early 18th century, and from then formed its present prototype by gaining experience. Currently, this is an examination form indispensable for the proper application of prescriptions.

Another considerable difference of Japanese Kampo Medicine from other countries possessing various types of TCM, is that it enables the use of medical insurance in the European medicine system, and for that it uses approximately 160 herbal materials and 148 Kampo prescriptions for medical use. Since Kampo medicine for medical use was approved by the Ministry of Health and Welfare in the 1976, the significance of Kampo Medicine is remarkable when considering that 90% of doctors practicing European medicine, which once became irrelevant to traditional medicine, now include it in their practice. Reflecting Japanese tradition, some 50% of the prescriptions are based on "Shang han lun" and "Jin gui Yao lue". These two classics represent basic contributions to Kampo medicine. The prescriptions given therein form the basis of TCM dosimetry. In Japan these have been historically highly valued.

In spite of the large number of opinions, the most marked characteristic of Japanese Kampo medicine is the application of prescriptions from the "Shang han lun" and "Jin gui Yao lue" to a variety of diseases and an extremely large body of related experiences.

For example, the ethical Kampo drug designated as No. 1, *Pueraria Decoction*, is used for many different diseases. Table 7 lists the diseases for which it has been used so far. It goes without saying that physicians do not prescribe the individual formulas indiscriminately to the various diseases, but first identify the relevant pattern (Sho) for the particular prescription to be used.

In the past several hundred years, physicians have continued to ponder about indications for individual prescriptions. This led to the accumulation of an enormous body of information and is reflected in current clinical practice.

3. Research

Research on Kampo Medicine is actively pursued, both basic research and clinical trials. In the clinical field, the most significant research effort is the clinical application of Kampo Medicine in modern medicine. Numerous research studies are published at many professional medical congresses every year including the Japanese Society of Oriental Medicine. It should be noted that research results in some areas exceed the latest European medical research.

It is important to note that in clinical research, other than modern medical research, there are studies of traditional logic. Studies are done on the treatment and comprehension of patient conditions based on traditional logic, the logic of present TCM, and medical treatment methods as abdominal diagnosis. Conversely, in the field of research, many outstanding, typical Japanese items can be found. These appear in publications of such groups as the Japanese Society of Oriental Medicine and the Association of East-Asian Medicine.

Table 7 Indications for *Pueraria Decoction*

Infections: influenza, measles, scarlet fever, encephalitis, meningitis
Respiratory tract: common cold, bronchial asthma, bronchitis, pneumonia
Circulatory system: hypertension
Alimentary tract: infectious enterocolitis
Locomotorium: stiff shoulders, neck pain, frozen shoulder
Nervous system: headache, tetanus, trigeminal neuralgia, myasthenia gravis, facial palsy
Otolaryngology: otitis media, otitis externa, parasinusitis, allergic rhinitis, hypertrophic rhinitis, nasal polyps, tonsillitis, pharyngolaryngitis, epidemic parotitis
Ophthalmology: conjunctivitis
Dermatology: urticaria, purulent dermatitis, eczema, herpes zoster
Stomatology and dentistry: temporomandibular arthrosis, dental pain
Breast: hypogalactia, mastitis
Psychiatry: narcolepsy, depressed mood
Other: common cold prevention, health maintenance, nocturnal enuresis

148 Prescriptions of Kampo Medicine in Medical Insurance

Kampo or Chinese herbal medicinal preparations for ethical use are pharmaceutical Kampo products including classical prescriptions of Chinese herbal extracts, pills, powders etc. These are made through manufacturing processes involving the extraction of essences by boiling them down in water, recovery in powder form, and the addition of excipients before their conversion to pharmaceutical preparations. The term "ethical use" implies that these pharmaceutical preparations are registered in the Drug Price List for National Health Insurance(NHI). They can, therefore, be prescribed by Japanese physicians at their discretion for daily medical use under the health insurance system. Kampo preparations have a long historical background in Japan where traditional Chinese herbal medicines have been used for more than ten centuries. Today there is a heavy demand among the Japanese for these prescriptions and the benefits they can offer, all covered under the national health insurance system for ordinary medical use. In 1976 the use of Chinese herbal preparations under the national health insurance system was approved for the first time, except for 6 formulations which were approved in 1967. Today, 148 registered formulations of Kampo prescriptions are available.

History of Chinese herbal preparations for ethical use

The development of ethical Kampo preparations was possible because Chinese herbal medicines had already been commercially available as extracts in the general pharmaceutical market.

Research to develop extracts of Chinese medicinal herbs was first initiated with 4 formulations of *Minor Bupleurum Decoction* (xiao chai hu tang) etc. These were prepared for clinical trials by Takeshi Itakura in the 1940s. After World War II, Hosono, Sakaguchi et al. of the Seikoen Hosono Clinic, conducted further studies aimed at developing commercial products from them in the 1950's. Although the resulting products attracted a highly favorable clinical evaluation they were not actually marketed.

In the 1950's, pharmaceutical scientists and manufacturers began further research for the development of extract preparations. A number of extract preparations made by certain pharmaceutical companies made their way into the OTC market around 1957, and were commercially promoted at drug stores. Around that time, Chinese herbal medicines achieved a high degree of popularity, with many people buying and taking these old remedies in the guise of new drugs at pharmacies.

However, general practitioners did not accept these Kampo preparations for prescription because they were not yet approved for use under the national medical insurance scheme. In 1967, 6 products supplied by Kotaro Kampo Pharmaceuticals were accepted for registration in the NHI Drug Price List, but were less successful in gaining widespread acceptance by the public. This was partly because they were not generally known and partly because they had not been used within the Chinese medicine establishment.

Chinese herbal preparations began to be available within the national health insurance system in 1975, and 43 formulations were approved for registration. Since then, thanks to the efforts of the Japan Society for Oriental Medicine and of the pharmaceutical companies, they have gradually come to be widely accepted among general clinicians. Many other Kampo formulations were newly registered in the NHI Price List, so that the total of currently registered Kampo products is now 148.

Manufacturing Methods and Product Forms

Traditional Chinese herbal medicines are sold in various product forms. Decoction is the most common, followed by pills and powders. In Japan, Chinese herbal preparations are manufactured by extracting them from a crude drug mixture containing the relevant ingredients with hot water. The extract is then isolated using spray dryers for ultimate conversion to the pharmaceutical preparations. The most commonly employed excipient is lactose. Starch is also used, but less frequently. The preparations are marketed in various forms:

Powders	Granules
Fine granules	Tablets
Capsules	Ointment
Pill	

Of these forms, the first three are the most common on the market. Pharmaceutical companies tend to prefer certain forms for their proprietary products. For instance, Tsumura offers granule preparations, and Kanebo fine granules. Some companies are presenting some of their products in tablets. Only Kotaro employs the capsule form on a limited scale for its Coptis Detoxification Decoction, Ephara, Aconite and Manchurian Wildginger Decoction, etc.

These Kampo preparations are produced according to manufacturing methods approved by the Ministry of Health, Labor and Welfare; and are subject to strict regulatory control in terms of concentration, composition and other quality requirements.

Among the classical preparations preparations, for example *Angelica and Peony Powder* or *Cassia Twig and Tuckahoe Pill* were developed as powders or pills. Ethical Kampo preparations, even if their original form was a powder or pill, are without exception preparations obtained as extracts from hot water. The reason for this procedure is, that it eliminates bacteria or fungi contained in the crude drugs and markedly decreases the concentration of heavy metals and pesticides. Microorganisms and fungi are killed and the concentration of heavy metals and pesticides decreased during extraction to one tenth of their initial concentration.

The additional combination of chemical substances with extracted Chinese herbal essences is not performed, because it is required to maintain the purity of the contained essences. In view of the need to ensure the purity of the essences contained in the preparations, no crude powder admixture to the product is admissible.

Clinical Applications of Kampo Medicine

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Annual Report Committee of Kampo Medicine

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Introduction

Legitimate Japanese medicine until about 140 years ago was Kampo Medicine. Naturally, the Dutch medicine, representing the legitimate European medicine of the day, was at the time of its introduction to Japan a non-mainstream medicine. Yet, its contents gradually became known and thus started to spread, so that in 1804 a mastectomy was performed by Seishu Hanaoka under general anaesthesia in a patient with breast cancer. This showed the emergence of physicians highly skilled in both forms of medicine and represents a successful example of integrative medicine that occurred 200 years ago. Trends in the medical world attempting the integration of western and Kampo forms of medicine in Japan actually were not modern efforts, but have been an important topic for several hundred years.

Kampo medicine is widely used in daily medical practice. This form of medicine originally was a therapeutically oriented medicine with outstanding characteristics. The excitement during its revival movement in the 1930s frequently showed it to be superior to the western medical approach. However, later the developments in western medicine and related sciences, greatly expanded therapeutic possibilities. Correspondingly, the scope of application of Kampo medicine has declined in proportion to the expansion of western medicine. However, currently it is still frequently applied for the treatment of many diseases for which western medicine is unable to provide satisfactory solutions.

In Japan, only a few physicians are specializing solely in Kampo medicine. Except for such extreme exceptions (that means almost always) physicians assume a western medical stance and add Kampo medical treatment as required. In other words, integrative medicine is practiced on a private level.

Described below is the generally practiced form of Kampo medicine in daily clinical routine. The descriptions are based on the experiences of the author and refer to the references 1 to 6 (either of which describes the general treatment of diseases). Citation of references from related research are indicated by numbers and are introduced in the order of their appearance.

References:

1. Otsuka K., Yakazu D., Shimizu T.: encyclopedia of Kampo Diagnosis, Manzando 1963
2. Terasawa K.: KAMPO Japanese-Oriental Medicine Insight from Clinical Cases, Standard Macintyre Tokyo ISBN915719-05-7 C3047
3. Hanawa T.: Lessons of Kampo Diagnosis, Kanehara Publishing 1995
4. Bando S.: Medical Practice with Kampo for Disease, Medical Yukon 2003
5. Otsuka K.: Medical Practice with Kampo for Symptom, Nanzando 1963
6. Matsuda K.: Medical Practice with Kampo for Symptom, Sogensha 1992
7. The Guideline of Medical Insurance for Kampo Medicine, edited by the Japanese Society for Oriental Medicine; revised edition, 1993

1. Geriatric Medicine

Among Japanese medical books, the "Kei Teki Shu" (1574) by Dosan Manase was the first to separate geriatric medicine from other clinical disciplines. Thus, Kampo medicine has a very long tradition of geriatric medicine, but with the addition of modern medical approaches in recent years, there are still more new developments. In particular the "Japanese Kampo Medical Care for the Elderly", edited by Katsutoshi Terasawa, is a very valuable book describing the Kampo medical treatment for senile diseases in great detail[1].

Problems of particular importance in the elderly are aging induced changes in the central nervous system, the so-called cerebrovascular dementia and Alzheimer's disease, which are associated with dementia, depressive states, delirium and similar mental symptoms. Currently these symptoms are the subject of multi-center cumulative research. Particularly, research into the efficacy of *Uncaria Powder* for the treatment of cerebrovascular dementia and *Angelica and Peony Powder* for Alzheimer's disease appear promising[2,3,4,5]. Recent research into the clinical effects of *Liver-Inhibiting Powder* on 'Behavioral and Psychological Symptoms of Dementia (BPSD) has been performed, and the results were published in "J. Clin. Psychiatry" and similar organs[6].

In Kampo medicine, aging is closely related to the kidneys. Age related changes in bones and joints too

are often related to a weakening of the kidneys. For low back pain due to osteoarthrosis, gonalgia and similar typical diseases of bones and joints in the elderly, the application of kidney tonifying preparations should be considered. The available data suggest that *Kidney Qi Pill* is effective for the treatment of postmenopausal osteoporosis.

There are several problems pertaining to diet also requiring careful attention, since aspiration for example may even be fatal. Certain reports and some research indicate that the use of *Pinellia and Magnolia Decoction* or *Lung-Clearing Decoction* for patients suffering from repeated aspiration pneumonitis produces favorable results[7,8].

Among the diseases of the urinary tract, Kampo medicines are frequently used for dysuria. *Kidney Qi Pill*[9] for the treatment of impending incontinence and *Middle-Reinforcing and Qi-Benefiting Decoction* or *Pueraria Decoction*[10,11] for abdominal pressure incontinence have been found to be effective in some studies. Kampo treatment also appears to be therapeutically useful during the early stages of hypertrophy of the prostate[12].

In the elderly, even simple infections like colds should not be taken lightly. The reason for this is that they may be complicated by bronchitis, causing loss of appetite and thus may easily lead to debility. The use of Kampo preparations during the early stages of infections in the elderly reportedly can lead to an early recovery at low costs. Akiba treated stationary patients suffering from upper respiratory inflammation or bronchitis and found a shorter duration of the morbidity and lower treatment costs than in patients treated only with western medications[13]. Moreover, Kampo also appears to be useful for the treatment of refractory infections like those caused by MRSA (see section on infections)[14].

1) Terasawa K.: "Japanese Kampo Medical Care for the Elderly", Igaku-Shoin 2005
2) Shimada Y., Terasawa K., Yamamoto T. et al: A well-controlled study of *Uncaria Powder* and placebo in the treatment of vascular dementia, J. Trad. Med. 11: 246-255, 1994
3) Terasawa K, Shimada Y, Kita T, et al: *Uncaria Powder* in the treatmentnt of vascular dementia a double-blind, placebo controlled study, Phytomedicine 4: 1522, 1997
4) Inanaga K., Dainoson K., Ninomiya Y. et al.: Multi-center joint research into the therapeutic effects of *Angelica and Peony Powder* on cognitive disorders in the elderly, Prog. Medicine 16: 293-300, 1996
5) Yamamoto T.: Kampo and modern medical treatment of Alzheimer's disease, Current Medicine 5: 96-102, 1989
6) Arai H., Iwasaki K.: Effects of *Liver-Inhibiting Powder* on Associated Symptoms Cognitive Disorders, Kampo Igaku 29(4): 13-15, 2005
7) Mantani, N. et al: Effect of *Lung-Clearing Decoction*, a Kampo medicine, in relapsing aspiration pneumonia an open-label pilot study, Phytomedicine, 9: 195-201, 2002
8) Iwasaki, K. et al.: The traditional Chinese medicine banxia houpo tang improves swallowing reflex. Phytomedicine, 6: 103-106, 1999
9) Yamanaka H., Suzuki T., Tokunaga S. et al.: Kampo Therapy for Incontinence, Kampo Igaku 21(8): 2-10, 1997
10) Kase H., Akashi M., Satou T.: Effects of *Middle-Reinforcing and Qi-Benefiting Decoction* on Pressure Incontinence, Kampo Igaku 29(3): 19-21, 2005
11) Shin S., et al.: Usefulness of *Pueraria Decoction* for Pressure Incontinence, Summary collection of the 47th General Academic Conference of the Japan Society of Oriental Medicine, P126, 1996
12) Harada K.: Japanese & Chinese Pharmacotherapy for Urologic Disorders, Japanese Journal of Clinical Urology 45: 295-300, 1991
13) Akiba T.: Effects and possibility of reducing medical costs by local and systemic application of Kampo preparations, Progress in Medicine, 21(8): 1863-1865, 2001
14) Kitahara M., Ishikawa S., Hara K.: Protective effect of *Ten Strong Tonic Herbs Decoction* against infection after acute ischemic stroke in elderly patients. Biotherapy 17(3): 287-298, 2003

2. Skin, Hair and Nails

Skin diseases used to belong in the realm of surgery. That is due to the fact that there were so many infections of the skin that required surgery. Many preparations have been developed for the treatment of skin infections, but can also be applied to skin diseases other than infections and currently are in fact widely used. Seishu Hanaoka, who did the world's first surgery for breast cancer under general anaesthesia, invented the representative preparations for the treatment of skin disease *Antiphlogictic Decoction with Ten Herbs* and *Purple Cloud Ointment*. His experiences are still useful today.

For diseases in this field there are excellent modern medical treatments, leaving fewer pathologic conditions that would require the use of Kampo preparations. There was not a significant reference to the use of Kampo therapy, but nevertheless a combination with Kampo medicine frequently provides additional benefits[1]. Among these conditions, Kampo is used most frequently for the treatment of atopic dermatitis. Regarding this disease, the combination of appropriate skin care and Kampo medicine is effective. Experienced dermatologists achieve good results by combining various preparations[2]. Here the effects of *Middle-Reinforcing and Qi-Benefiting Decoction* during infancy are particularly well known. The situation changes during childhood, adolescence and adulthood, where *Wind Dispersing Powder*, *For Eczema Decoction*, *Coptis Detoxificating Decoction*, *Bupleurum Liver-Clearing Decoction*, *White Tiger plus Ginseng Decoction*, *Yue Bi Decoction for Relieving Edema plus Atractylodes*, *Warming and Clearing Decoction*, *Head-Clearing Divaricate Saposhnikovia Decoction*, *Schizonepeta and Forsythia Decoction* and similar preparations are used. Still other effective preparations are available as decoctions. A significant number of physicians prescribe specially modified decoctions for refractory cases. Using a combination of topical steroids and Kampo preparations generally allows the physician to taper the dose of the topical drug application. The Kampo formulas are then used until patients are capable of managing self medication. These diseases are characterized clinically by their psychological aspects and some physicians also seek the cooperation of clinical psychologists for the therapy.

1) Morohashi M.: Current Situation and Use of Kampo Medicine in the Field of Dermatology, 27-46, Kampo Report of Dermatology, 1990
2) Ninomiya F.: Treatment of atopic dermatitis with extract preparations, The Kampo 13(1): 13-17, 1995

Steroid ointments or topical retinoids and similar western medical preparations are given priority for the treatment or psoriasis. Kuboki et al. reportedly found that a combination therapy with *Minor Bupleurum Decoction, Poria Powder with Five Herbs* had significantly improved effects on pruritus, erythema, scaling, infiltration, hyperplasia etc[3].

Topical steroid ointments alleviate the symptoms of seborrheic dermatitis, but the condition tends to be recurrent throughout life and therefore warrants a trial with Kampo therapy. *Antiphlogictic Decoction with Ten Herbs* or *Wind Dispersing Powder* are widely used for this purpose. Tsutsui et al. treated 30 patients with seborrheic dermatitis with *Wind Dispersing Powder* and reportedly found in their study a usefulness of 81.5%[4].

It has been recommended that *Yue Bi Decoction for Relieving Edema plus Atractylodes* or *Gentian Liver-Purging Decoction* are used in conjunction with western medical treatment during the acute phase of herpes zoster. For the treatment of postherpetic neuralgia as a late effect of this condition, *Ephdra, Aconite and Manchurian Wildginger Decoction*, *Cassia Twig Decoction plus Atractylodes and Aconite*, *Evodia, Fresh Ginger plus Chinese Angelica Cold Limbs Decoction* and similar preparations are used.

Formulas like *Schizonepeta and Forsythia Decoction*, *Cassia Twig and Tuckahoe Pill Plus Coix Seed*, *Antiphlogictic Decoction with Ten Herbs* etc. are generally used for the treatment of acne. A number of studies investigating this condition have also been performed. Okuma et al. performed a RCT using *Antiphlogictic Decoction with Ten Herbs* and *Coptis Detoxificating Decoction* in a combination with the usual topical applications and found for *Antiphlogictic Decoction with Ten Herbs* an efficacy of more than 75% and for *Coptis Detoxificating Decoction* of more than 40%[5]. Hashimoto et al. used in a RCT *Schizonepeta and Forsythia Decoction* and tetracycline antibiotics and found for *Schizonepeta and Forsythia Decoction* an equivalent usefulness of 60.6%. A combination of both preparations reportedly resulted in a usefulness of 78.6%[6].

Research has also been done on palmoplantar pustulosis. Hashimoto et al. treated 97 patients with palmoplantar pustulosis with *Warming and Clearing Decoction* extract and reportedly found in the fourth week a usefulness of 59.8% and by the eighth week 69.8%[7]. The research of Watanabe et al. using *Coptis Detoxificating Decoction* led to similar results[8]. *Antiphlogictic Decoction with Ten Herbs* is also widely used.

Regarding rosacea, numerous studies have investigated *Antiphlogictic Decoction with Ten Herbs*. Nakanishi administered *Antiphlogictic Decoction with Ten Herbs* to 50 patients with rosacea and reportedly found in 46 of these patients a marked improvement in the diffuse erythemata[9].

3) Kuboki J., Harada S. Fujisawa R., et al.: Investigation of the Effects of TJ-114 (*Minor Bupleurum Decoction, Poria Powder with Five Herbs*) Combined with Topical Steroids for the Treatment of Psoriasis, Journal of Clinical Therapeutics & Medicine 17: 927-937, 1991

4) Tsutsui K., Hirone T., Tanaka T. et al.: Clinical Effects of *Wind Dispersing Powder* on Atopic Dermatitis, Seborrheic Dermatitis, Nummular Eczema and Chronic Eczema, Kampo Igaku, 118: 309-312, 1994

5) Okuma M.: Combination Therapy of Orally Applied Kampo Medicine and Topical Preparations, Journal of Traditional Medicine 10: 131-134, 1993

6) Hashimoto Y., Matsuo S., Iizuka H.: Experiences with *Schizonepeta and Forsythia Decoction* in the Treatment of Acne, Records of the 12th Meeting of the Research Group for Oriental Medicine in Dermatology, 46-53, 1994

7) Hashimoto Y., Matsumoto M.: Experiences with *Warming and Clearing Decoction* in the Treatment of Palmoplantar Pustulosis, "Kampo Therapy" Helpful for Daily Practice, 10: 51-155, 1991

8) Watanabe M., Ohkuma N.: Experiences with *Coptis Detoxificating Decoction* in the Treatment of Palmoplantar Pustulosis, Kampo Igaku, 10:21-24, 1986

9) Nakanishi T.: Effects of *Antiphlogictic Decoction with Ten Herbs* on the Diffuse Erythemata of Rosacea and a Combination of Atopic Dermatitis and Rosacea, Current Situation of Kampo Therapy in Dermatology, 8: 67-83, 1997

Urticaria is occasionally an indication for Kampo therapy. For acute urticaria, suitable western medical treatment has been established, so that circumstances specifically calling for the application of Kampo therapy are few. Chronic forms of urticaria also include refractory cases for which attempts at using Kampo therapy have been made. Yano used a Kampo medicine combination therapy on 19 patients with refractory chronic urticaria continuing the original treatment and found a usefulness in 10 of the patients, ineffectiveness in 7 and aggravation in 2 patients[10]. The most frequently used preparation was *Bupleurum Liver-Clearing Decoction*, followed by *Wind Dispersing Powder* and *Minor Bupleurum Decoction, Poria Powder with Five Herbs* in that order. Horiguchi et al. treated 13 patients with chronic urticaria with *Capillary Wormwood Poria Powder with Five Herbs* and reported finding a slight usefulness in 85% of the cases[11].

For warts, there used to be two traditional treatment forms in Japan. One was the direct application of moxibustion on the warts, something all acupuncturists would do. This is extremely effective. The other is the preparation of a Yokuinin decoction and drinking this infusion. This latter treatment has frequently led to very good results, so that dermatologists now are using the extract. Among the Kampo formulas, *Ephedra, Apricot, Coiw and Licorice Decoction* is widely used.

When the cause of pruritus is determined, treatment should be directed at the etiology, otherwise this condition becomes an indication for Kampo therapy. For the treatment of senile dermal pruritus, *Kidney Qi Pill*, *Life-preserving Kidney-Qi Pill*, *Angerica Decoction, Antipruritus*, *Coptis Detoxificating Decoction* and similar preparations are used. RCTs have shown that the effects of *Kidney Qi Pill* or *Coptis Detoxificating Decoction* are comparable to antihistaminic drugs, achieving an improvement of approximately 70%[12,13,14]. The occurrence of dermal pruritus among patients with

chronic renal failure requiring dialysis is frequent and *Angerica Decoction, Antipruritus* has, in some cases, reportedly proven to be effective[15]. *Gentian Liver-Purging Decoction* or *"B"Character Decoction* are used for anal or genital pruritus.

10) Yanot T.: Kampo Therapy for Refractory Chronic Urticaria and Atopic Dermatitis, Kampo Igaku 19(7): 17-20, 1995
11) Horiguchi Y., Furukawa F. Mitani T. et al.: Clinical Experiences with *Antiphlogictic Decoction with Ten Herbs* and *Capillary Wormwood Poria Powder with Five Herbs* for the Treatment of Chronic and Acute Urticaria, Proceedings of Dermatology, 82: 365-368, 1987
12) Five Universities Joint Research Group: Experiences with the use of TJ-15, TJ-107 for the Treatment of Patients with Senile Pruritus, Dermatology in Western Japan, 53: 1234-1241, 1991
13) Fujita M., Ohno S., Miyaji Y. et al.: Therapeutic Effects of *Kidney Qi Pill* (Tsumura) on Refractory Senile Pruritus, Proceedings of Dermatology, 88: 175-179, 1993
14) Hori Y., Saida T., Torii Y. et al.: Clinical Experiences with *Angerica Decoction, Antipruritus* (Tsumura) for the Treatment of Senile Pruritus, Proceedings of Dermatology, 79: 209-214, 1984
15) Sakaizawa I.: One Case in which *Angerica Decoction, Antipruritus* for the Treatment of Refractory Erythema and Pruritus in a Patient on Dialysis due to Chronic Renal Failure, Kampo Igaku, 29(3): 38, 2005

Decubitus ulcers are treated following a fixed protocol, but combination with Kampo preparations may result in an even better prognosis. Nagasaka used a decoction of Kigi Kenchu To Ka Bushi (that is *Astragalus Middle-Strengthening Decoctoin* with added Toki (Japanese angelica root) and Bushi (aconite root)) and observed many favorable outcomes[16]. *Middle-Reinforcing and Qi-Benefiting Decoction* and *Ten Strong Tonic Herbs Decoction* are also widely used.

Dermal affections caused by cold include frost bite for which *Evodia, Fresh Ginger plus Chinese Angelica Cold Limbs Decoction* is effective and frequently administered[17]. According to Mori, RCTs have also been performed. Burns among heat induced affections is principally treated by western medical therapy, but occasionally topical Kampo medications like *Purple Cloud Ointment* are also applied. There are case reports about the treatment of burn scars in patients for whom surgical treatment could not be performed[18].

16) Nagasaka K. et al.: Therapeutic Experiences with *Astragalus Middle-Strengthening Decoctoin* for the Treatment of Decubitus Ulcers, Kampo Medicine (Jap. Journal of Oriental Medicine), 49: 273-280, 1998
17) Mori S.: Clinical Experiences with *Evodia, Fresh Ginger plus Chinese Angelica Cold Limbs Decoction* for the Treatment of Frost Bite, Kampo Shinryo 3(1): 46-51, 1984
18) Shimizu J.: A Patient with Burn Ulcers Successfully Treated with Shiun K, Kampo Igaku, 20(4): 122-123 1996

3. Eye

Technical books about ophthalmology existed in the Tang period in China. In Japan, the first specialized physicians appeared in the 13th century. Yet, their experiences were not handed down to us, so that the treatment in this field was developed only in recent years. Among the diseases and conditions Kuroki wanted to treat with Kampo medicine were eye strain, dry eye, central retinitis, some forms of pigmentary degeneration of the retina, some forms of glaucoma, some forms of cataracts, prevention of the recurrence of uveitis, conjunctival injection (cause unknown), pterygium, ticks, bulbar contusion, bulbar postsurgical care, neovascularization of the macula and similar conditions[1].

1) Kuroki S.: The Use of Kampo in These Cases - Eye Diseases; The Kampo for the Practical Physician No.3: 2-7, 1999

Regardless of whether conjunctivitis is of bacterial or viral origin, western medical treatment has priority. However, Yamamoto described patients he treated for keratomycosis or corneal herpes and obtained excellent results, stating that great expectations may be placed on Kampo therapy for infections of the eyes[2]. Application of steroid or antiallergic eye lotions as well as orally applied medications for the treatment of allergic conjunctivitis are standard therapy, but Kampo medications used for allergic rhinitis appear to be effective for conjunctivitis as well. *Minor Blue Dragon Decoction*, *Yue Bi Decoction for Relieving Edema plus Atractylodes*, *Ephdra, Aconite and Manchurian Wildginger Decoction* and similar preparations are widely used. *Dwarf Lilyturf Decoction*, *Bupleurum Cassia Twig and Dried Ginger Decoction*, *Liver-Inhibiting Powder*, *Modified Merry Life Powder*, *Kidney Qi Pill*, *Ginseng Decoction* and similar preparations are used for the treatment of dry eye[3]. There is also cumulative research into the use of *Ginseng Nutrition Decoction*. Fukuda et al. divided a group of 60 patients with dry eye of unknown origin in a group of 30 patients treated with *Ginseng Nutrition Decoction* and a placebo for 30 patients. Both groups used the same eye lotions and were evaluated after 12 weeks. At this point, a slight improvement of the subjective symptoms was reportedly found in 63.3% of the patients in the treatment group as compared to 50% in the placebo group[4].

2) Yamamoto S.: Kampo Therapy in Ophthalmology, Journal of Kampo Medicine 47(11): 10-18, 2000
3) Yamamoto S.: Kampo Treatment for Sjörgren's Syndrome, The Journal of Traditional Sino-Japanese Medicine 14(3): 23-36, 1993
4) Fukuda Y., Narita Y., Miwa M. et al.: Effects of *Ginseng Nutrition Decoction* for Dry Eye - New Ophthalmology 12: 1427-1430, 1995

Some forms of glaucoma are indications for Kampo therapy. *Yue Bi Decoction for Relieving Edema plus Atractylodes*, *Minor Bupleurum Decoction, Poria Powder with Five Herbs*, *Uncaria Powder* and similar preparations are used to lower ocular pressure. Toshihiko Ueda treated glaucoma patients (22 patients with primary open angle glaucoma, 5 patients with closed angle glaucoma, 1 patient with secondary glaucoma, 1 patient with normal pressure glaucoma and 2 patients with ocular hypertension), in whom control with eye lotions alone had been found insufficient. Over a period of 24 weeks with *Minor Bupleurum Decoction, Poria Powder with Five Herbs*, he reportedly found a significant reduction in ocular pressure[5]. Kinugawa et al. analyzed 7 patients suffering from open angle glaucoma treated with *Yue Bi Decoction for Relieving Edema plus Atractylodes*, which resulted in a reduction in ocular pressure. He

reported that the ocular pressure reducing effects started to appear at the earliest a few hours following administration. These effects apparently continued, and even after a treatment period of 2 years, no side effects had been observed. Clinically, carbonic anhydrase inhibitors are the drugs of first choice used to achieve a reduction in ocular pressure, while *Yue Bi Decoction for Relieving Edema plus Atractylodes* may be administered as a maintenance drug[6]. There are a large number of case reports pertaining to this disease.

5) Ueda T.: Effects of *Minor Bupleurum Decoction, Poria Powder with Five Herbs* on Glaucoma and Ocular Hypertension, Kampo Medicine (Jap. Journal of Oriental Medicine), 46(6): 154, 1996

6) Kinugawa K., Sato K.: A Case Where *Yue Bi Decoction for Relieving Edema plus Atractylodes* was Effective in Reducing Ocular pressure in Glaucoma, Kampo Igaku 21(10): 19-21, 1997

Uveitis is treated with steroids, but heat clearing Kampo preparations like *Gentian Liver-Purging Decoction* or *Coptis Detoxificating Decoction* can also be used. Yamamoto used *Coptis Detoxificating Decoction* (heat clearing formula) and blood stasis expelling formulas (blood activating and stasis resolving formulas) in the treatment of 23 patients with uveitis in whom treatment in university hospitals or similar institutions had not led to any improvements. He sought Kampo therapy and observed a favorable course. This author states that the addition of aconite root was occasionally required for elderly patients. Kuroki et al. modified the Yang tonifying formula Jio Inshi for the treatment of patients with uveitis in whom treatment with heat clearing formulas like *Gentian Liver-Purging Decoction* alone did not lead to improvements. He observed an alleviation of the ocular symptoms in three patients[7].

7) Kuroki S., Son K.: There Cases in Which the Application of Yang Tonifying Preparations was Effective for Uveitis, Kampo Medicine (Jap. Journal of Oriental Medicine) 54: Separate Volume 248, 2003

Kampo preparations are also used for some forms of cataracts and in some cases have led to an improvement in visual acuity. Fujihira treated 284 patients (568 eyes) with senile cataracts with *Kidney Qi Pill* and reported an improvement in visual acuity in 54.6% of the patients[8]. Kubota treated both eyes of 6 patients with senile cataracts over a period of 3 years with *Kidney Qi Pill* and reported that further progress of the cataract could be prevented[9]. *Kidney Qi Pill, Ginseng Decoction* and *Ten Strong Tonic Herbs Decoction* are also used. However, even if an improvement in visual acuity is observed, there are no data that would suggest any changes in the ophthamologically observed degeneration of the vitreous body with a few exceptions[10].

8) Fujihira K.: Treatment of Senile Cataracts with *Kidney Qi Pill*, Kampo Medicine (Jap. Journal of Oriental Medicine), 24(4): 465-479, 1973

9) Kubota Y.: Treatment Results of Senile Cataracts with *Kidney Qi Pill* - Basics and Clinics, 23(6): 2359-2540, 1989

10) Yamamoto S.: Kampo Therapy of Senile Cataracts, Current Kampo Therapy, Journal of Kampo Medicine & Herb, 1985

For age-related macular degeneration there are excellent western medical treatments, but occasionally Kampo therapy is also very effective. Shizuka et al. reported cases in which treatment with *Kidney Qi Pill* improved visual acuity[11]. However, in most cases of this disease an efficacy cannot be anticipated unless decoctions are used. Kuroki et al. prepared formulas based on TCM theories and later published two case reports in which improvements in ocular findings were observed[12]. Various studies have been performed dealing with macular edema (cause: branch retinal vein occlusion = BRVO, diabetic retinopathy = DR, central serous choroidopathy = CSC etc.). Generally, diuretic preparations like *Yue Bi Decoction for Relieving Edema plus Atractylodes* or *Minor Bupleurum Decoction, Poria Powder with Five Herbs* are used for these conditions. There is cumulative research into the use of *Minor Bupleurum Decoction, Poria Powder with Five Herbs*[13,14].

11) Shizuka T., Arai M. Sato H.: One Case with Age-Related Macular Degeneration in *Kidney Qi Pill* induced Improvement in Visual Acuity, Kampo Medicine (Jap. Journal of Oriental Medicine) 56: Separate Volume 249, 2005

12) Kuroki S., Son K.: Two Cases of Age-Related Macular Degeneration (AMD), Kampo Medicine (Jap. Journal of Oriental Medicine) 56: Separate Volume 248, 2005

13) Iwashita K., Yamagishi K., Yuge K. et al.: Effects of *Minor Bupleurum Decoction, Poria Powder with Five Herbs* on the Macular Edema of Branch Retinal Vein Occlusion, Clinical Ophthalmology, 54: 1247-1251, 2000

14) Isobe Y., Inamura M., Okada K. et al.: Clinical Effects of *Minor Bupleurum Decoction, Poria Powder with Five Herbs* on Eye Diseases Associated with Macular Edema, Pharmacology and Clinics, 3: 165-179, 1993

Retinic pigment degeneration is a hereditary disease, but early initiation and continuous treatment with Kampo preparations reportedly allows its progression to slow down. Yamamoto observed a temporary normalization of the visual field and the appearance of peripheral visual field, but also stated that the nature of the disease requires an observation period of 20-30 years[15]. Fujihira published one highly interesting case report where Kampo therapy induced a marked improvement in visual acuity.

15) Fujihira K.: A Case of Marked Improvement in Retinal Pigmentary Degeneration, Journal of Traditional Sino-Japanese Medicine, Selected Case Reports 188-189, Igaku Shuppan Center, 1984

4. Ear, Nose and Throat

Diseases in this field are indications for Kampo therapy, frequently for chronic inflammatory and allergic diseases, but it is also used for a number of other diseases that are often difficult to cure with western medicine.

Minor Bupleurum Decoction, Poria Powder with Five Herbs is frequently used for the treatment of stasis of the auditory tube or exudative otitis media among the forms of otitis media and there are many cumulative studies[1,2,3]. *Minor Blue Dragon Decoction* and *Yue Bi Decoction for Relieving Edema plus Atractylodes* are reportedly effective for the treatment

of adult diseases[4]. When an edema of the external meatus of the auditory tube develops due to a common cold, *Pueraria Decoction* or *Minor Bupleurum Decoction plus Cyperus and Perilla Leaf Powder* can be employed. Specialized treatment for both the acute as well as chronic phase of purulent otitis media should be given priority, but if required, a Kampo combination therapy can also be used. In particular, in chronic cases that prove to be almost refractory to the ordinary therapies, the application of Kampo medicine should beattempted. Here *Pueraria Decoction*, *Minor Bupleurum Decoction*, *Major Bupleurum Decoction*, *Schizonepeta and Forsythia Decoction*, *Cassia Twig plus Astrgalus Decoction* and similar preparations are used.

1) Nakajima T., Yanagida N., Niwa H., et al.: Therapeutic Effects of *Minor Bupleurum Decoction, Poria Powder with Five Herbs* for Exudative Otitis Media; Clinical Otorhinopharyngology 82(7): 1025-1030, 1989
2) Ito S., Hayashi N.: Clinical Experiences with *Minor Bupleurum Decoction, Poria Powder with Five Herbs* for The Treatment of Exudative Otitis Media; Prog. Med. 11: 3087-3091, 1991
3) Tanaka H.: Usefulness of *Minor Bupleurum Decoction, Poria Powder with Five Herbs* for Exudative Otitis Media; Prog. Med. 15: 1451-1452, 1995
4) Inoue H.: Immediate Effectiveness of a Combination Therapy with *Minor Blue Dragon Decoction* and *Yue Bi Decoction for Relieving Edema plus Atractylodes* in Adult Patients With Acute Exudative Otitis Media; Clinical Otorhinology 47(5): 361-366, 2001

Vertigo is a comparatively frequent indication for Kampo medicines among the diseases of the inner ear. This symptom may be the subject of a Kampo therapy whether the symptom is central or peripheral, and preparations are chosen depending on which of the symptoms are to be treated. For the treatment of Ménière's syndrome *Pinellia, Largehead Atractylodes and Tall Gastordia Decoction*, *Bupleurum plus Dragon's Bone and Oyster Shell Decoction*, *Tuckahoe, Cassia Twig, Largehead Atractylodes and Licorice Decoction* and similar preparations are used. Otherwise *Uncaria Powder* is used for vertigo due to insufficient cerebral circulation; *Tuckahoe, Cassia Twig, Largehead Atractylodes and Licorice Decoction* for the treatment of orthostatic syncopes. For dizziness in the elderly during walking *North Water God Decoction* finds frequent application. There is cumulative research into the effects of *Pinellia, Largehead Atractylodes and Tall Gastordia Decoction*[5]. In cases of tinnitus, depending on its cause, there are many refractory forms rendering treatment difficult. For chronic forms of tinnitus there are cumulative studies regarding *Life-preserving Kidney-Qi Pill*, *Bupleurum and Cassia Twig Decoction*, *Uncaria Powder*, *Bupleurum plus Dragon's Bone and Oyster Shell Decoction* and similar preparations[6,7,8,9,10].

5) Kimura T., Yamanaka N., Kuki K.: Clinical Effects of *Pinellia, Largehead Atractylodes and Tall Gastordia Decoction* for the Treatment of Tinnitus, Clinics of Ear and Nose 45 (5) 443-449, 1999
6) Onishi S., Sawaki S., Tsuchiya K. et al.: Multi-center Joint Clinical Trial Regarding the Effects of Tsumura *Life-preserving Kidney-Qi Pill* on Tinnitus, Developments in Otorhinopharyngology 37(3): 371-379, 1994
7) Kida K., Ito Y., Akita S. et al.: Effects of *Bupleurum and Cassia Twig Decoction* on Chronic Tinnitus, Clinics of Otorhinopharyngology, Supplement 98: 31-34, 2001
8) Iwasaki N., Sakamoto M.: Clinical Evaluation of *Uncaria Powder* in the Treatment of Tinnitus, Medical Journal of the National Noborito Hospital 12: 20-23, 2001
9) Saito A.: Evaluation of the Effects of *Uncaria Powder* on Tinnitus Using Headache and Hypertension as Indices, Clinics of Otorhinopharyngology, Supplement 98: 20-30, 1998
10) Takei S., Masuno H., Ando M. et al.: 9th Kanto Conference on Kampo Research in Otorhinolaryngology, clinical reports; clinical effects of *Bupleurum plus Dragon's Bone and Oyster Shell Decoction* on hypertension associated with tinnitus, Prog. Med. 16(9): 2242-2245, 1996

Application of Kampo medicine appears to be of particular importance for viral rhinitis (common cold) among the diseases of the nasal cavity and accessory nasal sini. In Japan, preparations listed in the "Shang han lun" are most frequently used. For further detail please refer to the section on infections. The treatment of acute inflammation of the paranasal sini follows the guidelines for the treatment of common cold. Yet, Kampo medicine is used more often for the treatment of chronic inflammation of the paranasal sini. Here preparations like *Pueraria Decoction*, *Pueraria Decoction plus Szeshwan Lovage and Magnolia Flower*, *Magnolia Flower, Lung-Clearing Decoction* find application[11,12], but when the underlying pathology has been identified as phlegm-fluid retention, *Pinellia, Largehead Atractylodes and Tall Gastordia Decoction* or *Two Vintage Herbs Decoction* are also administered.

11) Shibuya K.: Experiences with *Magnolia and Lung-Clearing Decoction* for the Treatment of Refractory Chronic Inflammation of the Paranasal Sini in Children, Prog. Med. 15: 1479-1481, 1995
12) Ito H.: Kampo Treatment of Chronic Inflammation of the Paranasal Sini. Clinical effects of long-term administration of *Pueraria Decoction plus Szeshwan Lovage and Magnolia Flower* for the treatment of chronic inflammation of the paranasal sini in children, Prog. Med. 12: 2578-2585, 1992

Allergic rhinitis is widely treated with *Minor Blue Dragon Decoction* or *Ephdra, Aconite and Manchurian Wildginger Decoction* either alone or else in combination with antiallergic drugs. For year-round treatment of allergic rhinitis with *Minor Blue Dragon Decoction,* double-blinded randomized controlled studies (DB-RCT) showed significantly better effects than in the control groups. Examination of the general improvement shows a marked improvement in 12.0% of the cases, an intermediate degree of improvement in 32.6% and mild improvements in 39.1% and thus with overall favorable results. The usefulness has received an acceptable rating of 46.2%[13]. Regarding *Ephdra, Aconite and Manchurian Wildginger Decoction* there is some cumulative research[14]. Besides the above mentioned drugs *Pueraria Decoction*, *Pueraria Decoction plus Szeshwan Lovage and Magnolia Flower*, *Yue Bi Decoction for Relieving Edema plus Atractylodes*, *Tea-Blended Szechwan Lovage Powder*, *Bupleurum Cassia Twig and Dried Ginger Decoction*, *Tuckahoe, Licorice, Dried ginger, Magnoliavine, Manchurian wildginger herb, Pinellia rhizoma and Apicot kernel Decoction* and similar

preparations are also used.

Seasonal allergic rhinitis is also treated in approximately the same manner, but during asymptomatic periods it is recommended to administer a combination of *Middle-Reinforcing and Qi-Benefiting Decoction* and *Angelica and Peony Powder* as a preventive medication.

13) Baba J., Takasaka T., Inamura N. et al.: Effects of Year-around Treatment with *Minor Blue Dragon Decoction* on Allergic Rhinitis, single and double-blinded comparative studies, Clinical Otorhinopharyngology 88(3): 389-405, 1995

14) Ito H., Baba J., Tkagi I. et al.: Evaluation of the Pharmacologic Effects of *Ephdra, Aconite and Manchurian Wildginger Decoction* on Allergic Rhinitis Clinical effects on nasal obstruction, Clinical Otorhinopharyngology 52: 107-118, 1991

Pharyngitis and tonsillitis are usually considered to be caused by the intrusion of wind heat, so that during the early stages, Shinryo Kaihyo (xin liang jie biao = releasing the exterior with pungent-cool) treatment principle is applied. Since most of these diseases are bacterial infections, they are indications for antibacterial therapy, but Kampo medicine is also useful. For further detail please refer to the section on infections. Regarding pharyngitis there are case series studied using *Balloon Flower Root Decoction*[15].

15) Tsujihisa S., Maeda S.: Experiences with the Use of Tsumura *Balloon Flower Root Decoction* extract for the Treatment of Patients with Acute Upper Respiratory Infections Complaining About Pharyngitis, Basics and Clinics, 19(5): 481-485, 1985

Anomalies of the pharyngolarynx are considered to be a form of psychosomatic disease treated in western medicine with tranquilizers, but in refractory cases, *Combind Minor Bupleurum Decoction and Pinellia and Magnolia Decoction*, *Cyperus and Perilla Leaf Powder*, *Pinellia and Magnolia Decoction* and similar preparations may also be used[16,17]. For dryness of the mouth *Dwarf Lilyturf Decoction*, *Ginseng Nutrition Decoction*, *White Tiger and Ginseng Decoction* etc are used[18,19]. These preparations are also effective for ptyalolithiasis.

16) Tanino T., Takeda Y., Harada K. et al.: Experiences with Tsumura *Combind Minor Bupleurum Decoction and Pinellia and Magnolia Decoction* in Treating Abnormal Feelings of the Pharyngolarynx (from a multi-center joint study), Prog. Med. 11: 3111-3114, 1991

17) Motoo Y., Taga H.: Effects of *Cyperus and Perilla Leaf Powder* on Abnormal Sensations in the Pharyngolarynx Associated with Depressive Moods, Kampo and Modern Therapy 7(3): 249-251, 1998

18) Okawa S., Shindoi N., Akagawa Y.: Clinical Effects of *Ginseng Nutrition Decoction* in Patients with Dry Mouth, Prog. Med. 21: 1037-1039, 2001

19) Umino M., Nagao M., Muroga S.: Effects of *White Tiger plus Ginseng Decoction* in Elderly with Dry Mouth - Analysis of the correlation between improvement in subjective symptoms and the diagnostic pattern, Kampo Medicine (Jap. Journal of Oriental Medicine) 45: 107-113, 1994

5. Lung

Many diseases of the respiratory tract are in daily practice treated with Kampo medicine. The use of Kampo medicines for the treatment of the chronic phase of bronchial asthma has so far achieved quite remarkable results. Since the spread of steroid inhalants has fundamentally changed the basic western medical therapy of asthma, Kampo preparations are now used less frequently than in the past. Still, since problems frequently develop in people continuously using bronchodilators or steroids, there is still a strong demand for Kampo preparations. Currently, the question of how Kampo therapy of patients otherwise treated with the most advanced modern western medical therapies should be employed is the subject of actively pursued research[1,2].

Among the extract preparations, *Minor Blue Dragon Decoction*, *Ephedra, Apricot, Licorice and Gypsum Decoction*, *Five Tiger Decoction*, *Combind Minor Bupleurum Decoction and Pinellia and Magnolia Decoction*, *Mistery Decoction*, *Dwarf Lilyturf Decoction* etc., are used for spleen deficiencies; *Middle-Reinforcing and Qi-Benefiting Decoction*, *Four Gentelmen Decoction* etc., for the elderly with kidney deficiency *Kidney Qi Pill*, *Ophiopogon, Schizandra and Rehmannia Pill* (*Eight-immortal Pill for Longevity*, which can be substituted with a combination of the extract preparations *Dwarf Lilyturf Decoction* + *Six Ingredient Pill with Rhemannia*) are used. Refer to the section on pediatric disease regarding pediatric asthma.

Cumulative research includes RCTs using *Combind Minor Bupleurum Decoction and Pinellia and Magnolia Decoction* and multi-center case series studies[3,4], both of which have achieved favorable results. Moreover, results of multi-center case series studies about *Minor Blue Dragon Decoction* showed a better than intermediate improvement in more than 52.2% of the cases[5]. Also, treatment of adults suffering from bronchial asthma associated with dry cough using *Dwarf Lilyturf Decoction* revealed an antitussive effect in 69.4% of the cases[6].

1) Ito T.: The Role of Kampo Therapy in the Age of Steroid Inhalants, Kampo Medicine (Jap. Journal of Oriental Medicine) 55(4): 447-453, 2004

2) Terasawa K.: Allergy and Kampo Therapy, Allergy 47 (1), 1998

3) Nakajima S., Takagi H., Tsutani Y. et al.: Examination of the Usefulness of *Combind Minor Bupleurum Decoction and Pinellia and Magnolia Decoction* Extract Fine Granules for the Treatment of Bronchial Asthma, Prog. Med. 9: 3138-3151, 1989

4) Egashira Y. and Nagano H.: A multicenter clinical trial of *Combind Minor Bupleurum Decoction and Pinellia and Magnolia Decoction* in patients with steroid-dependent bronchial asthma. Ann. NY Acad. Sci. 685: 580-583, 1993

5) Egashira Y., Yoshida M., Nagano J.: Clinical Effects of *Minor Blue Dragon Decoction* on Bronchial Asthma - evaluation of a multi-facility open trial, Kampo Medicine (Jap. Journal of Oriental Medicine). 45(4): 859-876, 1995

6) Tamaki T., Nizuma T.: Clinical Effects of *Dwarf Lilyturf Decoction* and Analysis of Excretatory Components in the Urine - Antitussive effects of *Dwarf Lilyturf Decoction* on bronchial asthma and active principles. Journal of the Tokyo College of Medicine and Dentistry 57(1): 23-30, 1999

There are several approaches to the treatment of chronic obstructive pulmonary disease (COPD). Clinical trials using *Middle-Reinforcing and Qi-Benefiting Decoction* extract have been performed, but did not necessarily result in marked improvements[7]. This disease is difficult to treat with extract preparations. Using decoctions, Haimoto on the other hand, reported outstanding results[8]. A number of studies deal also with pulmonary emphysema[9].

7) Sugiyama Y., Kitamura S.: Effects of the Kampo Medication *Middle-Reinforcing and Qi-Benefiting Decoction* in the Treatment of COPD, Japanese Thoracic Clinics 56: 105-109, 1997
8) Haimoto H.: Treatment of Chronic Obstructive Pulmonary Disease - A compromise between Chinese and western medical therapies, The Kampo 15(2): 46-1, 1997
9) Shimoda T., Taniguchi T. Yasuoka A.: Clinical Effects of *Combind Minor Bupleurum Decoction and Pinellia and Magnolia Decoction* in the Treatment of Chronic Pulmonary Emphysema and its Influence on Bronchial Hypersensitivity, J. Trad. Med. 8: 426-427, 1991

Bronchitis is also a good indication for Kampo. Depending on the conditions of the cough and properties of the sputum, many different preparations are used. Cumulative research showed that for patients presenting either watery sputum, wheezing or cough, observation of the effects of *Minor Blue Dragon Decoction* during DB-RCT, revealed that the observed general improvement and improvement of individual symptoms were both significantly better than in the placebo groups[10]. Treatment of this disease requires identification of the etiologic agent, and based on these findings, administration of appropriate antibacterial drugs, but Kampo preparations are often used in combination with those antibacterial drugs. Some studies are emerging that focus on the observation of variations in pulmonary function during combination therapy with *Combind Minor Bupleurum Decoction and Pinellia and Magnolia Decoction* and macrolide antibiotics[11].

There are case series studies indicating that the use of *Pueraria Decoction Plus Szeshwan Lovage and Magnolia* is effective for the treatment of the sinobronchial syndrome[12,13]. This disease is characterized mainly by the symptoms of bronchitis, but treatment of inflammation of the paranasal sini responsible for the condition, allows consequent pursuit of improvements.

10) Miyamoto S., Inoue H., Kitamura S.: *Minor Blue Dragon Decoction* for the Treatment of Bronchitis - Placebo controlled double-blinded comparative study, Clinical Pharmacology 17(8): 1189-1214, 2001
11) Tanno Y.: Kampo Therapy for Respiratory Diseases (round-table discussion) - Variations in pulmonary functions before and after a combination therapy with *Combind Minor Bupleurum Decoction and Pinellia and Magnolia Decoction* and macrolides, Kampo Medicine (Jap. Journal of Oriental Medicine) Vol. 21, Nol 10: 6-7, 1997
12) Egashira Y., Ushijima M.: Effects of a Combination Treatment of the Sinobronchial Syndrome (SBS), in Particular Erosive Panbronchiolitis with *Pueraria Decoction Plus Szeshwan Lovage and Magnolia*, Kampo and Allergy 4: 33-41, 1990
13) Kato S., Kishiro I., Onuma N. et al.: Long-term Combination Therapy Using Erythromycin and *Pueraria Decoction Plus Szeshwan Lovage and Magnolia* for the Treatment of Sinobronchial Syndrome, Breathing 17(8): 919-926, 1998

Bronchiectasis, during acute exacerbations, requires modern western medical treatment, mainly using antibiotics, but during the chronic phase it is a comparatively good indication for Kampo therapy. *Lung-Clearing Decoction*, *Yin Nourishing Real treasure Decoction*, *Tuckahoe, Licorice, Dried giner, Magnoliavine, Manchurian wildginger herb, Pinellia rhizoma and Apicot kernel Decoction* have been used for the treatment.

Among the pulmonary infections, community-acquired pneumonia is currently treated primarily with modern western medicine. However, Kampo therapy has been used so frequently, that it has actually controlled the survival prognosis. Accordingly, there have been many studies and combination therapies are still employed today. Thus, administration of antibacterial agents still represents the basics and Kampo medicine should not be the treatment of first choice.

Hospital acquired pneumonia develops based on a multitude of different factors and while it is generally not possible to provide a specific therapy, the condition is usually marked by a decrease in immune function associated with a high likelihood of infections. Under these circumstances either only Qi tonifying or else both Qi and Blood tonifying preparations like *Middle-Reinforcing and Qi-Benefiting Decoction* or *Ginseng Nutrition Decoction* are used. In cases of MRSA infections, or infections with non-specific acidophilic bacteria, effectiveness of antibacterial agents may hardly be expected and the same holds true for chronic infections of the lungs.

Ideopathic fibrotic interstitial pneumonia is a group of several disease entities. Except in a small number of exceptions, all of these forms are exceedingly difficult to treat. While that is so, there are a number of case reports dealing with Kampo medicine. Ito reported that mild cases of interstitial pneumonia can be treated with Kampo[14]. Preparations used so far in published cases include representative items like *Minor Bupleurum Decoction*, *Cassia Twig Decoction plus Atractylodes and Aconite*, *Bupleurum Cassia Twig and Dried Ginger Decoction*, *Kidney Qi Pill*, *Tuckahoe, Apricot Seed and Licorica Decoction* etc. Several valuable case reports have been published by Honma and also have been described in the introduction[15].

14) Ito T.: Kampo Therapy for Respiratory Diseases, Kampo Medicine (Jap. Journal of Oriental Medicine) 54: 29-46, 2003
15) Honma Y.: Kampo Medical Treatment under Health Insurance, Respiratory Division (26), Ideopathy Interstitial Pneumonia (IIP) 29: 562-563, 1993

Note:

It is known that several Kampo preparations may induce drug interstitial pneumonia. Since 1992 several cases of drug interstitial pneumonia due to *Minor Bupuleurum Dragon Decoction* have been reported. Statistically the condition occurs in about 4 out of 10,000 people. Considering that the incidence of interstitial pneumonia caused by the use of interferon in patients with chronic hepatitis is 25 times higher, this rate does not seem to be so high. Being completely different in nature from the interstitial pneumonia described in the main body of this text, this condition can be diagnosed early based on subjective symptoms and chest x-rays and discontinuing the offending drug at that time will lead to recovery. In severe cases treatment with steroids may be required, but the disease will basically run a benign course.

6. Heart

In traditional Kampo medicine there is no concept for blood pressure. Congestive heart failure is viewed as a form of edema, while coronary artery diseases are described as Kyohi (xiong bi = chest qi-blockage) and classified and treated under different entities. Only recently these symptoms have been summarized as circulatory diseases. Following the progress in modern medicine therapies, Kampo medicine is also developing.

The incidence of coronary artery diseases, that used to be rather low in Japan, is continuously increasing in association with the westernization of diet and life style.

Some forms of angina pectoris are an indication for Kampo medicine. The prognosis of patients with angina pectoris in Japan, compared to the prognosis of the same disease in America, is comparatively good and patients accordingly can be managed mostly on ordinary pharmacotherapy. Yet, often there are also indications for percutaneous transluminal coronary angioplasty (PTCA) or coronary artery bypass grafts (CABG). The frequency of both of these procedures is rising. The use of Kampo medicine is restricted to patients managed by pharmacotherapy. In particular, the use of Kampo preparations for effort angina requires a sufficiently thorough diagnosis. Conversely, Kampo medicine for atypical angina caused by vascular spasms is often rather effective and therefore warrants a try more than in patients with effort angina[1]. However, in these cases treatment with extracts proves to be difficult, so that decoctions are used. There are a number of case reports[2]. Japanese people often present the indications for phlegm dispelling preparations like *Trichosanthes Fruit, Chinese Chive and Pinellia Decoction*, while blood activating and stasis resolving preparations are not required as much as in China. Otherwise, *Bupleurum plus Dragon's Bone and Oyster Shell Decoction*, *Coptis Detoxificating Decoction*, *Bupleurum Cassia Twig and Dried Ginger Decoction*, *Angelica Decoction* and similar preparations are also used. During the acute phase of a myocardial infarct, Kampo therapy is contraindicated. After initiating rehabilitation following the acute phase, however, Kampo therapy is employed in order to improve the general condition and prevent recurrences[3].

1) Haimoto H.: Traditional Chinese Medical Therapeutic Effects on Angina Pectoris and Coronary Angiographic Findings - from a standpoint of functional and structural diseases, The Kampo 15(1): 7-16, 1997
2) Kimura H., Furuta K., Mitsuma T.: *Major Sinking Into the Chest Decoction* for the Treatment of Microvascular Angina Pectoris - Clinical experiences, Kampo Medicine (Jap. Journal of Oriental Medicine) 54(5): 945-950, 2003
3) Sato Y.: Ischemic Heart Diseases and Rehabilitation: Kampo and Advanced Therapies 4(4): 361-365, 1995

Disorders of the pulse rate are classified as rhythm disorders, i.e., some forms of arrhythmia are indications for Kampo therapy. The medication varies depending on the pathology. The classification into Kampo types and the names of western medical diagnoses do not necessarily match, but generally *Pinellia and Magnolia Decoction*, *Cassia Twig plus Dragon's Bone and Oyster Shell Decoction*, *Roasted Licorice Decoction*, *Bupleurum plus Dragon's Bone and Oyster Shell Decoction*, *Bupleurum Cassia Twig and Dried Ginger Decoction* and similar preparations are often used for paroxysmal supraventricular tachycardia and *Roasted Licorice Decoction* for the treatment of ventricular extrasystoles. There are cumulative studies regarding the use of *Bupleurum plus Dragon's Bone and Oyster Shell Decoction*[4].

4) Konnai K., Munakata M., Sato A.: Clinical Effects of *Bupleurum plus Dragon's Bone and Oyster Shell Decoction* on Tachycardia Developing during Administration of Ritodrine Hydrochloride, Obstetrics and Gynecology 65(12): 1767-1770, 1997

Among the forms of heart failure, the acute phase of congestive heart failure is principally an indication for treatment with modern medicine using diuretics and cardiotonic agents. Among the case reports where Kampo medicine had been used, there are occasional examples, where its use caused a remarkable improvement. Extracts are indicated for the chronic phases, causing improvement of mild congestive heart failure. Preparations used include *Fourstaman Stephania Decoction*, *Roasted Licorice Decoction*, *Kidney Qi Pill*, *North Water God Decoction*[5,6,7].

Congestive heart failure

5) Yakubo S., Kinoshita Y. et al.: Clinical evaluation of *Fourstaman Stephania Decoction* (Mu-fang-Yi-Tang): A Japanese and Chinese traditional medicine for heart failure, J. Trad. Med. 19: 159-163, 2002
6) Ebe Y..: Treatment of Senile Heart Failure with Modifications of *North Water God Decoction* - 30th Japan Oriental Medicine Conference, Chu-Shikoku Branch General Assembly at the Tottori Conference 2001 (presentation)
7) Katayose H., Shirato K.: Experiences with *North Water God Decoction* for the Treatment of Patients with Severe Heart Failure Associated with Marked Atrial Blocks - 52nd General Assembly of the Japan Society for Oriental Medicine 2001 (presentation)

7. Systemic Hypertension

The first choice of treatment for hypertension is life style guidance and administration of antihypertensive drugs. In Japan there is no notion of trying to control high blood pressure by Kampo medicine alone. Although many case reports show that a successful reduction in blood pressure had been achieved with the administration of Kampo preparations alone, Kampo medicines are not considered to have a more reliable effect than diuretics, ACE inhibitors, ARB, calcium antagonists, β-blockers, α-blockers and similar preparations. Two cumulative studies deal with *Uncaria Powder*[1,2]. Both systolic and diastolic effects were observed. In actual clinical practice *Uncaria Powder* is widely used and attempts have been made to increase the antihypertensive effect by adding *Uncaria Powder* to this extract preparation[3].

This preparation acts by pacifying the liver and subduing yang in conditions marked by ascendant

hyperactivity of liver yang, which is a condition in modern hypertensives. Several reports describe the use of preparations for other pathologic conditions such as the use of *Pinellia, Largehead Atractylodes and Tall Gastordia Decoction* for congestions and excess of phlegm-dampness, and *Barbary Wolfberry, Chrysanthemum and Rehmannia Pill* or *Kidney Qi Pill* for liver and kidney deficiency[4,5,6,7,8,9].

Generally, Kampo medicines are not antihypertensives per se, but can be used for and appear to be useful for, associated symptoms. Frequently used extract preparations include among others, *Major Bupleurum Decoction*, *Coptis Detoxificating Decoction*, *Three Huang Heart-Clearing Decoction with Three yellow color Herbs*, *Bupleurum plus Dragon's Bone and Oyster Shell Decoction*, *Divaricate Saposhnikovia Miraculous Powder*, *Seven Herbs Decoction for Hypertension* and similar preparations.

1) Nagata K., Hara K., Kinoshita T. et al.: QOL in Hypertension and the Effects of *Uncaria Powder*, J. Trad. Med. 8: 252-253, 1991
2) Nagata K., Okamoto A., Kamano Y. et al.: Treatment of Hypertension with *Uncaria Powder* and QOL, J. Trad. Med. 6: 426-427, 1989
3) Bando S.: Practice of Kampo Therapy Based on Disease Names, Medical Yukon, 2004
4) Ogawa I.: Effectiveness of *Bupleurum plus Dragon's Bone and Oyster Shell Decoction* for the Treatment of Hypertension, Kampo Therapy 12, 1993
5) Sasaki A., Matsunaga A., Kusuda M. et al.: Effects of *Major Bupleurum Decoction* and *Uncaria Powder* on Essential Hypertension, Clinics and Research 70: 269-279, 1995
6) Ishikawa T., Umemura S.: Special: Strategies of Hypertension Therapies - Oriental medial therapies for hypertension, Therapy 82(4): 1367-1372, 2000
7) Arakawa K., Saruta T., Abe K. et al.: Double-Blinded Controlled Study of the Effects of *Coptis Detoxificating Decoction* on Accessory Symptoms of Hypertension, Clinics and Research 80(2): 354-372, 2003
8) Horino M.: Effects of *Three Huang Heart-Clearing Decoction with Three yellow color Herbs* on Hypertension, Kampo Medicine (Jap. Journal of Oriental Medicine) 53(1-2): 41-46, 2002
9) Katayose H.: Experiences with *Bupleurum plus Dragon's Bone and Oyster Shell Decoction* in the Cardiovascular in Ambulatory Practice, Kampo Medicine (Jap. Journal of Oriental Medicine) 52(1): 25-38, 2001

8. Blood Vessels and Lymphatics

Most of obstructive arterial diseases are caused by atherosclerotic changes, but there is almost no clinical research pertaining to the mechanism of action of Kampo medicine on this etiologic factor. Yet, a substantial amount of basic research has been performed. For example, treatment of rabbits with experimental models of atherosclerosis using *Bupleurum plus Dragon's Bone and Oyster Shell Decoction*, showed that the treatment was reportedly able to prevent disturbances of vascularization and some other effects[1].

1) Hasegawa M.: Antiatherosclerotic Modes of Action of Kampo Preparations and their Effects, Prog. Med., 15: 131-140, 1995

Regarding obstructive arterial diseases of the lower extremities, there is considerable experience pertaining to the treatment of intermittent claudication in patients with arteriosclerosis obliterans. Currently, mainly blood activating and stasis resolving preparations are administered, but kidney deficiency due to aging or rheum turbidity, heat toxins also occur, so that it is often not possible to treat these conditions simply using the blood activation and stasis resolving principle. Widely used extract preparations include *Evodia, Fresh Ginger plus Chinese Angelica Cold Limbs Decoction*, *Cassia Twig and Tuckahoe Pill*, *Channels-Dredging and Blood-Activating Decoction*, *Szechwan Lovage and Angelica Decoction for Regulating Blood Flow*, *Kidney Qi Pill* etc.[2,3,4,5]. The pathology of Buerger's disease may be different, but treatment principles are similar[6]. *Evodia, Fresh Ginger plus Chinese Angelica Cold Limbs Decoction* is often used for Raynaud's disease and there are relevant case series studies[7].

2) Takahashi K., Sugano M., Totsuka O. et al.: Patients Treated with *Channels-Dredging and Blood-Activating Decoction Plus Coix Seed* for Arteriosclerosis Obliterans, Kanto Koshin Etsu Branch of the Japan Society of Oriental Medicine, 1999 Sectional Meeting in Gunma Prefecture (presentation)
3) OikawaO., Fujiki N., Matsumoto A. et al.: Attempts at Treating Arteriosclerosis Obliterans (ASO) Induced Chronic Pain of the Lower Extremities with Combination Therapy - Autogenic Training and Kampo (*Peony and Licorice Decoction* and *Cassia Twig Decoction plus Atractylodes and Aconite*) - 35th General Conference of the Japan Society of Oriental Psychosomatic Medicine in 1999 (presentation)
4) Ide Y., Sekiyama H., Kitamura M. et al.: Three Patients with Arteriosclerosis Obliterans Successfully Treated with Kampo Medicine, Journal of the Japanese Pain Clinic Society 5(3): 327, 1998
5) Kaneki M.: Practical Application of Japanese Kampo Medicine for the Treatment of Arteriosclerosis Obliterans, Three cases, Kampo Medicine (Jap. Journal of Oriental Medicine) 47(6): 150, 1997
6) Kubo T.: Case Report of a Patient Following Quadruple Amputations due to Buerger's disease with Refractory Pain Treated with *Life-preserving Kidney-Qi Pill*, Hokkaido Study Group for Kampo Treatment of Elderly Patients, 7th Conference 1998 (presentation)
7) Kaneuchi H.: Comparison of Raynaud's Phenomenon in Patients with Connective Tissue Diseases and Thermographically Observed Skin Temperature - Pharmacologic Evaluation of *Evodia, Fresh Ginger plus Chinese Angelica Cold Limbs Decoction*, Summaries from the Public Toyooka Hospital 11: 69-76, 1999

Orthostatic hypotension is a good indication for Kampo therapy. Here *Tuckahoe, Cassia Twig, Largehead Atractylodes and Licorice Decoction*, *Poria Powder with Five Herbs* and similar preparations are used[8,9]. Controlled clinical trials regarding the treatment of diabetics with orthostatic hypotension using *Poria Powder with Five Herbs* have been reported and demonstrated good results[10]. Moreover, *North Water God Decoction*, *Pinellia, Largehead Atractylodes and Tall Gastordia Decoction* and similar preparations have also been used for the treatment of hypotension.

8) Shiotani Y., Shintani T., Fujinaga H. et al.: Discussion of the Modes of Action of *Tuckahoe, Cassia Twig, Largehead Atractylodes and Licorice Decoction* and its Clinical Application, Kampo Medicine (Jap. Journal of Oriental Medicine) 50(1): 21-28, 1999
9) Shibahara N., Goto H., Kita T. et al.: Two Cases of Orthostatic Hypotension Where the Use of *Tuckahoe, Cassia Twig, Largehead Atractylodes and Licorice Decoction* was Effective - a discussion, Kampo Medicine (Jap. Journal of Oriental Medicine) 53(6): 244
10) Nakamura H., Nakamura T., Nakagawa T. et al.: Effects of *Poria Powder with Five Herbs* on Orthostatic Hypotension in Diabetics, Diabetes Frontier 11: 561-563, 2000

9. Blood

In TCM there are such concepts as blood deficiency and blood stasis. Although they do somewhat resemble hematologic diseases like anemia or congestion as they are understood in modern medicine, they are in practice different concepts. Accordingly, when treating diseases of the blood with Kampo medicine, an integration of these traditional and modern medical concepts has to be achieved.

For the treatment of diseases that can be treated with current medical methods, there is little use of Kampo medicine, but in cases where standard therapeutic methods cannot be established, they may have their practical application. Aplastic anemia or idiopathic thrombocytopenic purpura (ITP) are examples.

Anemia may have many causes and therapy depends on the relevant cause. Iron deficiency anemia is treated using preparations with added iron powder, but currently iron can also be administered orally or intravenously, so that former methods have now become redundant. Thus, with the progress of modern medicine, Kampo medicine in this field is used only under special circumstances.

For example, if substantial blood loss is anticipated during major surgeries, autologous blood is sometimes collected prior to surgery and thus artificially induces anemia. Under these circumstances attempts have been made to achieve an early recovery through treatment with Kampo medicine[1,2].

Regarding leukemia and other myeloproliferative disorders, modern medical therapies are given priority. There is only a limited number of reports about treating these disorders with Kampo medicine. The same applies to lymphomas.

Idiopathic thrombocytopenic purpura (ITP) is not treated easily with Kampo medicine, but there are examples where *Back to the Spleen Decoction*, *Modified Back to the Spleen Decoction*, *Bupleurum and Cassia Twig Decoction* have led to favorable changes[3]. This applies also to aplastic anemia or the osteomyelodysplastic syndrome for which there are some cumulative studies[4,5].

1) Aoe H., Matsuo T., Ebisutani M. et al.: Effects of *Ten Strong Tonic Herbs Decoction* on Presurgical Autologous Blood Pooling in Cancer Patients, Progress in Obstetrics and Gynecology 17: 67-71, 2000

2) Aoe H., Sumida Y., Takada K. et al.: Effects of a Combination Therapy with Erythropoetin Preparations and *Ginseng Nutrition Decoction* on Presurgical Autologous Blood Pooling, Progress in Obstetrics and Gynecology 15: 67-71, 1998

3) Sakuragawa N., Yasunaga K., Nomura T. et al.: Multi-center Clinical Evaluation of TJ-137 (*Modified Back to the Spleen Decoction*) for the Treatment of Idiopathic Thrombocytopenic Purpura (ITP), Clinics and Research 70(11): 3711-3718, 1993

4) Miyazaki T., Uchino H., Kimura I. et al.: Clinical Usefulness of EK108, *Ginseng Nutrition Decoction*, for the Treatment of Aplastic Anemia, Clinical Medicine and Pharmacology 10(11): 2591-2603, 1994

5) Miyazaki T., Uchino H., Kimura I. et al.: Clinical Usefulness of *Ginseng Nutrition Decoction* for the Treatment of Osteomyelodysplastic Syndrome, Clinical Medicine and Pharmacology 10(11): 2575-2590, 1994

10. Alimentary Tract

Diseases in this field are extremely common in daily life and an enormous variety of Kampo medicines are provided for their treatment. An abundance of preparations are used that allow minute responses.

Among the forms of dyspepsia, functional indigestion is a good indication for Kampo therapy. For symptoms like pain or discomfort mainly in the upper abdominal region (upper abdominal distention, burning sensation, tympanism, yawning, nausea, retching, vomiting) the use of Kampo medicines should be considered, because they may be more useful than for other symptoms. Frequently used preparations include *Pinellia Heart-Purging Decoction*, *Coptis Decoction*, *Bupleurum and Cassia Twig Decoction*, *Stomach-Calming Powder*, *Stomach-Calming Powder*, *Middle-Soothing Powder*, *Tuckahoe Decoction*, *Ginseng Decoction* etc. Many reports deal with NUD and there are relevant cumulative studies[1]. Available data suggest that the preparation *Six Gentlemen Decoction* facilitates the excretory function of the stomach and a number of studies revealed the effectiveness of this preparation[2,3,4,5]. Not restricted to these preparations, there are also a number of other formulas for indefinite complaints of the upper abdomen. In particular, *Stomach-Calming Powder* suits the physical disposition of the Japanese, who are easily affected by dampness, and for people who are exposed to cold, *Middle-Soothing Powder* is a frequently used formula. For the above described reasons these two formulas are widely used as OTC preparations.

1) Muraki T., Sugiyama M.: Kampo Therapy of NUD (Non-Ulcer Dyspepsia) - Discourse on Kampo preparations - New Drugs and Clinics 46(4): 433-437, 1997

2) Harasawa S., Miyoshi A., Miwa T. et al.: Postmarketing Multi-Facility Joint Clinical Trial on the Effects of *Six Gentlemen Decoction* on Dysmotility Type Indefinite Complaints of the Upper Abdomen - intergroup comparison in double-blinded groups, Progress in Medicine 187(3): 207-229, 1998

3) Miyoshi A., Yachi A., Masamune O. et al.: Clinical Effects of *Six Gentlemen Decoction* on Indefinite Gastrointestinal Symptoms like Chronic Gastritis - Multi-Facility Comparative Trial Using Cisapride as Control, Prog. Med. 11: 1605-1631, 1991

4) Hamamoto T., Kadohara M., Yoshimura T. et al.: Multi-Facility Clinical Evaluation of *Six Gentlemen Decoction* for Indefinite Complaints of the Upper Abdomen, Clinics and Research 71(7): 1888-1894, 1994

5) Sato J., Shima H., Asaki S. et al.: Multi-Facility Clinical Evaluation of *Six Gentlemen Decoction* for Chronic Gastritis Associated with Indefinite Complaints of the Upper Abdomen, Prog. Med. 11: 1633-1645, 1991

While Kampo medicine provides a variety of formulas for the treatment of constipation, it attempts to regulate intestinal function without using laxatives to improve bowel movements. For conditions requiring the use of laxatives, *Formula include Rhubarb*, in particular *Rhubarb and Licorice Decoction*, is frequently used[6]. This is a very simple preparation combining only the crude drugs Daio (rhubarb root) and Kanzo (licorice root) that is mild and regularly used by many people in whom constipation is not associated with abdominal pain. For scybalum *Hemp Seed Pill* with its "moistening the intestines to loosen

the bowel" action is used, a condition particularly frequent in the elderly with an accordingly high demand[7]. Conversely, *Minor Middle-Strengthening Decoction* or *Major Middle-Strengthening Decoction* are preparations lacking any laxatives and therefore serve to regulate intestinal function.

6) Miyoshi A., Masamune O., Fukutomi H. et al.: Clinical Effects of *Rhubarb and Licorice Decoction* According to New Evaluation Criteria, Alimentary System 22: 314-328, 1996

7) Sato H.: Elderly and Kampo (constipation, diarrhea, loss of appetite, gastric distention), Kampo and advanced therapies for disorders of the alimentary tract 2(1): 15-18, 1993

Among the forms of diarrhea, acute diarrhea is principally an indication for western medical treatment. *Poria Powder with Five Herbs* is very effective for the treatment of rota virus induced acute gastroenteritis, so that this is an often selected preparation[8]. This applies also to Norwalk virus induced conditions. Most of the chronic forms of diarrhea are non-inflammatory and among these a substantial portion is considered to be due to irritable bowel syndrome (IBS). The treatment of IBS conforms to that of diarrhea. Crohn's disease and ulcerative colitis will be discussed later.

8) Hashimoto H.: Comparative Study of Applications of *Poria Powder with Five Herbs* and *Minor Bupleurum Decoction, Poria Powder with Five Herbs* Applied as Enemas as Treatment for Pediatric Viral Gastroenteritis Associated with Vomiting, Kampo Igaku 25: 73-75, 2001

Among the diseases of the stomach and duodenum, H. pylori induced gastritis can now be relieved due to the advances in antibacterial therapies, so that the role of Kampo medicine has declined in this field. Yet, Kampo preparations are still used as a first choice treatment for this disease. The prescriptions match those described above for indigestion. For *Pinellia Heart-Purging Decoction* there are some cumulative studies[9]. *Six Gentlemen Decoction* is used for endoscopically confirmed erosive gastritis and has reportedly been associated with a 92.9% ratio of better than mild improvement[10].

9) MiyoshiA., Murohisa B., Kitagawa M. et al.: Examination of the Usefulness of Kanebo's *Pinellia Heart-Purging Decoction* for the Treatment of Gastritis (Acute Gastritis, Acute Exacerbations of Chronic Gastritis), Prog. Med. 13: 1627-1632, 1993

10) Makino S., Yasutake K., Irie K. et al.: Effects of *Six Gentlemen Decoction* on Verrucose Gastritis, Kampo Igaku Vol. 20, No. 6: 17-21, 1996

Currently H_2-blocker and proton pump inhibitors are available for the treatment of gastroduodenal ulcers, so that Kampo medicine is used only in a supplementary function. Regarding the use of *Three Huang Heart-Clearing Decoction with Three yellow color Herbs* and *Coptis Detoxificating Decoction* there are cumulative studies[11]. Moreover, Kampo medicine is also administered in patients in whom peptic ulcers have healed, in order to prevent their recurrence and reportedly have been proven to be useful[12]. Also, a number of case reports showed that Kampo therapy was effective, when modern medications could not be used for one reason or other[13].

11) Namiki M., Yachi A., Yoshida Y. et al.: Investigation into the Usefulness of *Three Huang Heart-Clearing Decoction with Three yellow color Herbs* and *Coptis Detoxificating Decoction* for the Treatment of Gastritis or Peptic Ulcer, Clinics and Research 71: 1585-1597, 1994

12) Watanabe H.: Examination of Maintenance Therapy for Peptic Ulcer Using a Combination with Kampo Medicine, Kampo Igaku, Vol. 19, No.1: 6-7, 1994

13) Haimoto H.: Isolated Kampo Therapy for the Acute Phase of Gastroduodenal Ulcer 3(1): 4-6, 2001

Irritable bowel syndrome in Japan is exceedingly frequent, found in about 35% of outpatients visiting departments of gastrointestinal diseases. This disease, being a sort of psychosomatic disease, may not be easily resolved by using Kampo medicine, but is generally considered to be a good indication for frequently used preparations like *Pinellia Heart-Purging Decoction* or *Cassia Twig Decoction plus Peony*. Classified by types *Ginseng Decoction*, *North Water God Decoction*, *Ginseng, Poria and Atractylodes Macrocephala Powder*, *Open the Spleen Decoction* and similar preparations are used for the treatment of the diarrhetic type, while for the constipation type *Modified Merry Life Powder*, *Rhubarb and Licorice Decoction*, *Hemp Seed Pill*, *Cassia Twig Decoction plus Piony and Rhubarb* are used. For a form characterized by alternating constipation and diarrhea *Cassia Twig Decoction plus Peony*, *Cold Limbs Powder*, *Important Formula for Painful Diarrhea* and the like are used, but for the gas type associated with abdominal pain *Areca Seed Decoction with Nine Herbs* or *Cyperus and Perilla Leaf Powder* is used. There is an extremely large number of case reports, and for *Cassia Twig Decoction plus Peony*, *Stomach-Calming Powder* and *Cyperus and Perilla Leaf Powder* also cumulative studies[14,15,16,17].

14) Sasaki D., Uehara A., Hiwatashi N. et al.: Clinical Effects of *Cassia Twig Decoction plus Peony* on Imitable Bowel Syndrome, Clinics and Research 75: 1136-1152, 1998

15) Mizuno S., Nagata K., Yoshida K. et al.: Therapeutic Effects of *Cassia Twig Decoction plus Peony* on Imitable Bowel Syndrome, Diagnosis and Therapy 73: 1143-1152, 1985

16) Tokutomi K.: Results of Using *Stomach-Calming Powder* for Imitable Bowel Syndrome, Kampo and Clinics 43: 1187-1194, 1996

17) Shiramine K., Hisamura M., Akita K. et al.: Effects of *Cyperus and Perilla Leaf Powder* on Gas Type Irritable Bowel Syndrome, Kampo Igaku Vol. 23, No. 2, 1999

Crohn's disease is an intractable condition for which there is a small number of valuable case reports[18]. Treatment is not aimed directly at this disease, but rather at the symptoms of ileus that may be caused by it and the available cumulative research revealed its usefulness[19].

18) Kogure T., Shimada Y., Tosa H. et al.: A Patient with Recurrent Crohn's Disease in whom Treatment with Japanese Kampo Medicine Proved to be Highly Effective, Kampo Medicine (Jap. Journal of Oriental Medicine)

19) Takazoe M., Yamauchi H.: Attempt at Medical Treatment of Symptoms of Ileus in Crohn's Disease: Usefulness of *Major Middle-Strengthening Decoction*, Research Team for the Investigation of Refractory Inflammatory Intestinal Disorders, 1997 Research Report: 137-141, 1998

Ulcerative colitis responds well to treatment with Kampo medicine and numerous studies have been

performed[20,21]. In mild cases Kampo may be used independently, but in intermediately to severe cases Kampo is administered in the form of a combination therapy with salazopirine or steroids. Used extracts include *Cassia Twig Decoction plus Peony*, *Cassia Twig Decoction plus Piony and Rhubarb*, *Minor Bupleurum Decoction, Poria Powder with Five Herbs*, *Bupleurum and Cassia Twig Decoction*, *Scutellaria Decoction*, *Szechwan Lovage Rhizoma, Angelica Root, Ass-hide Glue and Argy Womwwod Leaf Decoction* and similar preparations; but for serious therapy, decoctions are required. There is cumulative research regarding *Minor Bupleurum Decoction, Poria Powder with Five Herbs*[22,23].

20) Matsuike T., Suzuki Y., Nozawa H. et al.: Significance of Kampo Therapy for the Treatment of Ulcerative Colitis, Prog. Med. 19(4): 879-885, 1999
21) Takahashi T.: Kampo Therapy for Inflammatory Bowel Diseases (Ulcerative Colitis, Crohn's Disease), Kampo and Advanced Therapies 5(3): 225-229, 1996
22) Suzuki Y., Matsuike T., Nozawa H. et al.: Indications for and Limitations of *Minor Bupleurum Decoction, Poria Powder with Five Herbs* in the Treatment of Ulcerative Colitis, Current Medicine 11: 132-136, 1996
23) Okubo A., Masuda H., Hayashi N. et al.: Experiences with the Use of Kampo Therapy (*Minor Bupleurum Decoction, Poria Powder with Five Herbs*) for Ulcerative Colitis, Medical Journal of Nippon University 55: 286-289, 1996

Kampo medicines are also useful in the field of abdominal surgery. There is cumulative research regarding the use of *Major Middle-Strengthening Decoction* for the treatment of Ileus caused by abdominal surgery[24,25,26,27]. Moreover, in a department of abdominal surgery, *Major Middle-Strengthening Decoction* was administered to facilitate the recovery of intestinal peristaltic, which resulted in a shortening of the hospital stay by several days. Consequently, this is useful in improving cost efficiency.

24) Kubo N., Uchida Y., Akiyoshi T. et al.: Effects of *Major Middle-Strengthening Decoction* on Ileus - Multi-facility study, Prog. Med. 15 (9): 1962-1967, 1995
25) Yokota H., Kobayashi H., Kasamaki S. et al.: Research into the Prevention of Postsurgical Adhesive Ileus, Japan Medical News 3986: 16-18, 2000
26) Sugiyama M.: Investigation of the Usefulness of *Major Middle-Strengthening Decoction* for Postsurgical Adhesive Ileus, Prog. Med. 12: 1668-1372, 1992
27) Furukawa Y., Kawasaki N., Hanyu N.: Effects of *Major Middle-Strengthening Decoction* on Ileus Following Surgery of Alimentary Tract - Basics and Clinics - Kampo and Advanced Therapies 12(3): 235-241, 2003

Among the diseases of the anus, hemorrhoids and hemorrhoidal bleeding are indications for Kampo therapy. For hemorrhoids, the preparation *"B" Character Decoction*, developed in the 19th century by a Japanese physician, is widely used and there are relevant cumulative studies[28]. Clinically, depending on the pathologic condition, this is frequently combined with 'activating blood and resolving stasis', "clearing heat and removing toxins', 'Qi tonifying' and 'upraising' preparations. In puerperal women, attention has to be paid to hemorrhoids that do not improve within one month following delivery. Some cumulative studies show the results of the application of this preparation in such patients[29]. Conversely, for pain associated with spasms of the internal sphincter muscle of the anus, *Peony and Licorice Decoction* is administered and, according to a number of studies, produced favorable results[30]. Moreover, for the treatment of incarceration of hemorrhoids *Ephedra, Apricot, Licorice and Gypsum Decoction* is used and occasionally has produced dramatic results, but this usage is peculiar to Japan.

28) Yoshio T., Ynagida K., Sumiyama Y. et al.: Clinical Effects of *"B"Character Decoction* on Internal Hemorrhoids, New Drugs and Clinics 40: 2087-2096
29) Honda T. et al.: Women and Hemorrhoidal Diseases, No. 4 - Effects of Kampo (*"B" Character Decoction*) - Maternal Hygiene Vol. 31, No. 1, 1990
30) Endo T.: Clinical Results of the Application of *Peony and Licorice Decoction* for Pain Associated with Spasms of the Internal Sphincter Muscle of Anus Due to Anal Laceration, New Drugs and Clinics 49: 712-719, 2000

11. Liver, Biliary Tract and Pancreas

Among the lesions of the liver, those associated with icterus used to be major indications for this therapy for diseases like acute hepatitis A and the below described lesions of the gallbladder. Beside these conditions, the final stage of hepatocytic damage liver cirrhosis and a number of complicating conditions were the subject of initial therapeutic attempts. Since therapeutic interventions during the early stages of chronic hepatitis recently became possible, and in conjunction with the progressive clarification of the "state of disease" even for other forms of liver diseases, Kampo therapies using Kampo preparations have been developed. Kampo medicine is frequently used for chronic viral hepatitis, regardless of whether this is hepatitis B or C. Some DB-RCT studies examined the use of *Minor Bupleurum Decoction* for the treatment of hepatitis B and reportedly achieved significantly better results than in the control groups[1]. Yet, many physicians do not consider *Minor Bupleurum Decoction* to be the ideal preparation and administer it rather as a decoction that can be freely modified[2,3,4,5,6]. The other comparatively frequently used extracts include *Modified Merry Life Powder*, *Minor Bupleurum Decoction plus Cassia Twig and Tuckahoe Pill*, *Bupleurum and Cassia Twig Decoction*, *Bupleurum Cassia Twig and Dried Ginger Decoction* and similar preparations. A number of physicians have pointed out that histologically the morphology of hepatitis C differs from that of hepatitis B, and viewed from the standpoint of Kampo medicine, deficiency patterns are more frequent; so that prescriptions vary from those applied for hepatitis B. *Middle-Reinforcing and Qi-Benefiting Decoction*, *Summer Heat-Clearing and Qi-Benefiting Decoction*, *Six Gentlemen Decoction* and similar spleen and stomach tonifying preparations are used[7,8,9]. Recently, combination therapies using PEG-interferon and ribavirin have become the standard therapy, but available data indicate that a further combination with Kampo medicines achieves better results. There are cumulative studies dealing with interferon combination therapies. Moreover, regarding transition from hepatitis C to liver cirrhosis following an interferon therapy, a number of excellent

studies show significantly better effects than for ordinary liver protective drugs[10].

1) Mizuta M., Murata K., Morimoto T. et al.: Evaluation of *Minor Bupleurum Decoction* for the Treatment of Chronic Hepatitis - Investigation Using Single and Double Blinded Studies - Liver, Gallbladder, Pancreas 12(1): 155-168, 1986
2) Fujiwara K., Mochida S.: Kampo Therapy for Diseases of the Liver, Gallbladder and Pancreas - Kampo therapy for viral hepatitis - Kampo and Advanced Therapy 5(3): 240-246, 1996
3) Itoh T.: Effect of Kampo Treatment on chronic viral hepatitis on the basis of traditional diagnosis, Journal of Traditional Medicines 16(1): 7-14, 1999
4) Nakada K., Furue M., Takakuwa H. et al.: Kampo Therapy for Chronic Liver Disorders, Japanese Oriental Medical Journal 33(3): 25, 1983
5) Baba H.: Effects of *Modified Merry Life Powder* in the Treatment of Chronic Hepatitis, Kampo Medicine (Jap. Journal of Oriental Medicine) 33(4): 29-34, 1983
6) Haimoto H.: New Traditional Chinese Medical Therapies for Chronic Active Hepatitis - Pilot study dealing with detoxification/resolving phlegm/ activating blood - Clin. J. Trad. Chin. Med. 16(2): 146-150, 1995
7) Ito T., Nagasaka K., Kita T. et al.: Clinical Effects of *Middle-Reinforcing and Qi-Benefiting Decoction* in the Treatment of Patients with Chronic Hepatitis C - Correlation between the presence of Qi deficiency pathology and effectiveness - Kampo Medicine (Jap. Journal of Oriental Medicine) 50(2): 215-223, 1999
8) Shimizu H.: Hepatitis C - Concepts and Therapies - Clin. J. Trad. Chin. Med. 15(4): 370-374, 1994
9) Kumada H.: Effects of *Minor Bupleurum Decoction* for the Treatment of Hepatitis C Non-responsive to Interferon, Clinics of Adult Diseases 24(8): 1103-1109, 1994
10) Nakajima O., Sone Y., Onishi H. et al.: Inhibitive Effects of *Minor Bupleurum Decoction* on the Progression from Hepatitis C to Liver Cirrhosis, Clinics and Research 76(5): 1008-1015, 1999

Regarding autoimmune hepatitis, reports indicated that in individual cases certain ingenuous modifications of the prescriptions led to a relief of the symptoms, while the standard therapy with steroids was used more in the sense of a complementary therapy and thus allowed a gradual dose reduction or even interruption of the steroid therapy. Certain cumulative studies document the latter case using *Minor Bupleurum Decoction, Poria Powder with Five Herbs*[11].

11) Masuda A., Kajii N., Omura R. et al.: Therapeutic Effects of *Minor Bupleurum Decoction, Poria Powder with Five Herbs* on Autoimmune Hepatitis Regarding Steroid Dose Reduction and Relief of Side Effects - Diagnosis and Therapy 81(4): 911-915, 1993

Fatty liver (both alcoholic and non-alcoholic fatty liver diseases) is caused mainly by alcohol consumption, obesity, diabetes mellitus, hypertriglyceridemia etc. To improve these factors, in particular the fatty liver due to overfeeding, *Major Bupleurum Decoction* was administered and found in cumulative studies to be useful[12].

12) Ishioka T., Miura H., Shinoi T. et al.: Clinical Research into the Effects of *Major Bupleurum Decoction* on Fatty Liver due to Overfeeding, Basics and Clinics: 4425-4431, 1992

Regarding liver cirrhosis, the state of disease in Kampo terms differs for the compensated and decompensated phases, so that the type of preparation varies.

During the compensated phase, the therapy follows the therapy for chronic hepatitis, but fibrosis is here viewed as a manifestation of blood stasis, so that often activating blood and resolving stasis medicinals are added. The decompensated phase calls mainly for skillful management of water metabolism, requiring foremost combinations of diuretics[13]. In extremely rare cases, administration of large doses of *Poria Powder with Five Herbs* reportedly resulted in the overnight disappearance of large amounts of ascites[14]. Moreover, the use of *Poria Powder with Five Herbs* in patients with decompensated liver cirrhosis associated with ascites non-responsive to diuretics, had reportedly been effective in 40% of the patients[15]. The above described studies used extracts, but generally decoctions are prescribed for decompensated liver cirrhosis. *Middle-Reinforcing and Qi-Benefiting Decoction*, *Qi-Reinforcing and Middle-Being Healthy Decoction, Separate and Reduce Decoction*, *Areca Seed Decoction with Nine Herbs*, *Bolster the Spleen Decoction, North Water God Decoction*, *Augmented Five-Ingredient Powder with Poria* and similar formulas are basic preparations. Conversely, cumulative studies showed that treatment with *Ginseng Nutrition Decoction* improved the thrombocytopenia associated with liver cirrhosis.[16].

13) Okubo H., Amaki S., Fujita S. et al.: Kampo Therapy for Liver Cirrhosis, Kampo and Advanced Therapies 5(3): 247-252, 1996
14) Imadaya A. et al.: Elimination of Refractory Ascites Through Sweating - A case treated with large amounts of *Poria Powder with Five Herbs* extracts - Kampo Medicine (Jap. Journal of Oriental Medicine) 32(4): 37-42, 1981
15) Takamori S., Furuki T., MiyazakiT. et al.: Investigation of the Usefulness of *Poria Powder with Five Herbs* for the Treatment of Compensated Liver Cirrhosis, Kampo Igaku 13(10): 300-305, 1989
16) Iwata K., Kamimura S., Shijo S. et al.: Administration of *Ginseng Nutrition Decoction* for the Treatment of Liver Cirrhosis - In particular regarding the effects on thrombocytopenia, Clinics and Research 72(3): 746-750, 1995

Some research has been done on the inhibition of the progression from liver cirrhosis to liver cancer through administration of Kampo medicines. These studies clearly showed that through the administration of *Minor Bupleurum Decoction* or *Ten Strong Tonic Herbs Decoction* the incidence of liver cancer decreased significantly[17,18]. Recent published studies indicated this as a possible mechanism for the functioning of *Minor Bupleurum Decoction* as a radical scavenger.

17) Oka H., Yamamoto S., Kuroki T. et al.: Prospective Study of Chemoprevention of Hepatocellular Carcinoma with *Minor Bupleurum Decoction*(Tj-9), Cancer 76(6): 743-749, 1995
18) Higuchi K., Watanabe A.: Investigation of the Inhibition of the Progression from Liver Cirrhosis to Liver Cancer Through Administration of *Ten Strong Tonic Herbs Decoction* Methods in Kampo Pharmacology 5: 29-33, 2000

Gallstones, excluding asymptomatic cases, are currently removed by endoscopic cholecystectomy. While today the surgical removal constitutes the general form of treatment, this condition used to be a good indication for Kampo medicine. Even today Kampo medicines are used in some selected cases. *Major Bupleurum Decoction* is a representative preparation and there are 2 cumulative studies dealing with it[19,20]. The removal of stones with Chinese medicine is not performed in Japan. Regarding

cholecystitis or choledocholithiasis there are some case reports, but generally these conditions are not considered to be indications for Kampo therapy.

19) Shoda J., Matsuzaki, Y., Tanaka N. et al: The inhibitory effects of dai-chai-hu-tang (dai-saiko-tou) extract on supersaturated bile formation in cholesterol gallstone disease. Am. J. Gastroenterol 91(4): 828-30, 1996
20) Fujita K.: Effects of *Major Bupleurum Decoction* for Cholelithiasis Attacks, Kampo Medicine (Jap. Journal of Oriental Medicine) 45(2): 411-421, 1994

Among diseases of the pancreas, mild forms of acute pancreatitis are an indication for Kampo medicine, but usually are treated with western medicine, so that there are only few case reports and no cumulative studies. During the intermittent phases of compensated chronic pancreatitis, this condition is frequently treated with Kampo medicine. Yet, there are only a few published studies. Tanaka et al. reported on Kampo therapy used with 62 patients presenting hyperamylasemia, who were suspected to suffer from chronic pancreatitis. Combined efficiency was 38.8%, and among the preparations, *Bupleurum and Cassia Twig Decoction* was used in 15 patients, *Liver-Soothing Decoction* in 16, *Pinellia Heart-Purging Decoction* in 9, *Life-Prolonging Pinellia Decoction* in 6, *Middle-Soothing Powder plus Tuckahoe* in 4, *Nourish the Stomach Decoction with Aucklandia and Amomum* in 5 and *Galanga and Bitter orange Decoction* in 3 patients[21]. The efficacy in this trial was not particularly high, but the trial included mostly patients that had already consulted multiple western medical facilities and for whom Kampo therapy eventually became the final resort. When taking this situation into consideration, the standard results would probably be evaluated higher.

21) Nakada K., Hosono Y., Hosono H. et al.: Kampo Therapy of Chronic Pancreatitis, Kampo Medicine (Jap. Journal of Oriental Medicine) 36(4): 25-44, 1986

12. Gynecology

Since women have menstruations and give birth, the necessity to comprehend pathologic conditions that differ from those in men has been recognized since ancient times. Traditionally, the Jin gui yao lue, compiled by the end of the second century established a specialty of treating women. Later in the "Qian jin fang" (compiled by the middle of the seventh century), the section on gynecology was put at the top of this script. In Japan, this field was separated from other fields since the 15th century and in the first half of the 18th century Genetsu Kagawa (1700-1777) discovered approximately at the same time as the British William Smellie, that the fetus assumes an inverted position within the uterus and developed a large number of innovative techniques and preparations. Current gynecologists and obstetricians still inherit this tradition, skillfully using a small number of Kampo medicines for the relevant therapies. Many of the diseases in this field are indications for Kampo therapy based on experience.

Regarding abnormal bleeding prior to menopause, Kampo medicines are frequently used for both hypermenorrhea and dysfunctional uterine bleeding. Generally hormone therapy is performed, but specialists also use Kampo therapy either as an adjunctive or independent therapy. There are cumulative studies regarding *Szechwan Lovage Rhizoma, Angelica Root, Ass-hide Glue and Argy Womwwod Leaf Decoction*[1,2,3]. Naturally, in the presence of organic disease, modern medical treatment is given priority.

1) Iwabuchi S.: Hemostatic Effects of *Szechwan Lovage Rhizoma, Angelica Root, Ass-hide Glue and Argy Womwwod Leaf Decoction* on Dysfunctional Uterine Bleeding, Kampo Medicine (Jap. Journal of Oriental Medicine) 50: 883-890, 2000
2) Hatano K., Terawaki S., Tomonari S.: Hemostatic Effects of *Szechwan Lovage Rhizoma, Angelica Root, Ass-hide Glue and Argy Womwwod Leaf Decoction*, Medical Journal of the Oita Prefectural Hospital 14: 95-103, 1985
3) Inaba Y., Hori S., Hosoi N. et al.: Treatment of Dysfunctional Uterine Bleeding with *Szechwan Lovage Rhizoma, Angelica Root, Ass-hide Glue and Argy Womwwod Leaf Decoction* Extract, Obstetrics and Gynecology 8: 825-836, 1983

Premenstrual tension syndrome (PMS) is a good indication for Kampo therapy. Presenting as a typical pattern of Qi stagnation and blood stasis, treatment with Kampo medicine has already developed into a standard[4]. The representative preparation *Modified Merry Life Powder* is frequently used, while *Angelica and Peony Powder*, *Cassia Twig and Tuckahoe Pill*, *Warm the Menses Decoction* and *Goddess Powder* are also widely used.

4) Ushiroyama T.: Kampo Therapy for Dysmenorrhagia and Prementrual Syndrome, Kampo Therapeutic Manual for Physicians Specializing in Gynecology (Nagai Publications): 56-59, 2003

Dysmenorrhagia is almost always associated with Oketsu (blood stasis) so that blood activating and stasis resolving medicinals are used in relevant prescriptions. *Cassia Twig and Tuckahoe Pill* is a frequently used preparation and besides this, *Peach Kernel Purgative Decoction*, *Negotiation Decoction*, *Modified Merry Life Powder* and similar preparations are also widely used. When channel warming and cold dispelling (Onkei Sankan) is required, *Evodia, Fresh Ginger plus Chinese Angelica Cold Limbs Decoction* or *Middle-Soothing Powder* may be considered. *Middle-Soothing Powder* is reportedly very effective for menorrhalgia associated with marked stomach cold affecting the entire body. In cases of blood deficiency, *Angelica and Peony Powder*, or for spleen deficiency *Minor Middle-Strengthening Decoction* or else *Angelica Middle-Strengthening Decoction* are commonly used. As a special use, the short-term administration of *Cassia Twig and Tuckahoe Pill* during menstruation has been recommended and produced favorable results[5]. Moreover, research conducted in recent years clearly showed that *Peony and Licorice Decoction* inhibits the prostaglandin

production, so that attempts have been made to administer this preparation in synchronization with the menstrual cycle[6]. Secondary dysmenorrheal, due to endometriosis or submucosal myomata, is also a good indication for Kampo therapy, but often the western medical treatment receives priority.

5) Ota H., Tanaka T., Kushima T.: Short-term Administration of *Cassia Twig and Tuckahoe Pill* During Menstruation for the Treatment of Dysmenorrhea, Progress of Kampo Research in Gynecology and Obstetrics 17: 48-50, 2000

6) Imai A, Ito M., Tamaya T.: Mechanisms of the Inhibition of Prostaglandin Production by *Peony and Licorice Decoction*, Kampo Igaku 20: 218-221, 1996

Regarding irregular menstruation *Cassia Twig and Tuckahoe Pill*, *Peach Kernel Purgative Decoction* and similar blood acitivating and stasis resolving preparations are widely used. In addition, *Modified Merry Life Powder* and like Qi stagnation blood stasis formulas, blood tonifying preparations like *Four Herbs Decoction*, *Evodia, Fresh Ginger plus Chinese Angelica Cold Limbs Decoction*, *Aconite and Ginseng Decoction* and the like Yang tonifying and cold dispelling prescriptions, Qi mobilizing drugs like *Pinellia and Magnolia Decoction*, *Cyperus and Perilla Leaf Powder* or else heat clearing preparations like *Coptis Detoxificating Decoction* or *Three Huang Heart-Clearing Decoction with Three yellow color Herbs* also find, their application depending on the presenting pattern. In this area Kampo medicines are prescribed as a standard therapy[7,8].

7) Kawakami S., Umeki M., Ikuta Y. et al.: Kampo Therapy in our Clinic and its Effects on Irregular Menstruations, Progress of Kampo Therapy in Gynecology and Obstetrics 21: 52-56, 2004

8) Ushiroyama T.: Kampo Knowledge for Gynecologists and Obstetricians, 6. Kampo Therapy and relief from irregular menstruation (General Remarks)

Smooth muscle myoma uteri is the most frequently observed benign tumor of the female genitalia and there are many reports about its treatment with Kampo medicine[9,10,11]. The question whether the myoma can be reduced in size using Kampo medicine is very important and there have been several related studies. Inoue et al. used *Cassia Twig and Tuckahoe Pill* and measured the size of the myoma with ultrasound. A number of studies reported the relevant ratios of size reduction[12,13].

9) Sakagami S.: Myoma Uteri, Gynecology and Obstetrics 42: 79-91, 1990

10) Aiba S.: Is Kampo Effective? Gynecology and Obstetrics 45: 1192-1193, 1991

11) Dozono H.: Kampo Therapy of Myoma Uteri, Gynecology and Obstetrics 71: 669-672, 1995

12) Inoue S., Nakada M., Kataoka Y. et al.: Investigation of the Myoma Uteri Size Reducing Effect of *Cassia Twig and Tuckahoe Pill* Measured with Ultrasound, Progress of Kampo Research in Gynecology and Obstetrics 14: 59-62, 1997

13) Inoue S., Nakada M, Kataoka Y. et al.: Investigation of the Myoma Uteri Size Reducing Effect of *Cassia Twig and Tuckahoe Pill* Measured with Ultrasound (second report), Progress of Kampo Research in Gynecology and Obstetrics 15: 57-62, 1997

Endometriosis is frequently identified as the cause for abnormal bleeding or secondary dysmenorrhea and Kampo therapy is often attempted. The administration of *Cassia Twig and Tuckahoe Pill* for the purpose of avoiding surgery has been reported[14].

14) Tanaka T.: Effectiveness of *Cassia Twig and Tuckahoe Pill* Extract Tablets Administered with the Purpose of Avoiding Surgery in Endometriosis like Diseases, WE No. 4: 7-8, 2003

Several clinical reports deal with ovarian insufficiency. Studies in which *Angelica and Peony Powder* was administered to all patients with ovarian insufficiency showed a tendency towards increasing concentrations of estrogen and progesterone during the luteal phase[15]. Patients with various ovarian disorders were treated either with clomiphene alone (52 patients) or a combination therapy of clomiphene and *Angelica and Peony Powder* (41 patients) and led to the publication of highly interesting results[16]. Moreover, when 34 patients with polycystic ovarian syndrome (PCOS) presenting hypertestosteronemia were treated with *Angelica and Peony Powder*, a reduction in testosterone levels was reported for 30 (91%) of these patients[17].

15) Koyama T, Ohara M, Ichimura M. et al.: Effect of Japanese Kampo medicine on hypothalamic-pituitary-ovarium function in women with ovarian insufficiency, Am J Chin Med, 16: 47-55, 1988

16) Yasui T., Kahara M., Aono T. et al.: Investigation of the Efficacy of a Combination Therapy of Clomiphene and *Angelica and Peony Powder* in Patients Without Ovarian Disorders, Journal of the Japan Society of Infertility 40: 83-91, 1995

17) Takahashi K., Kitao M.: Polycystic Ovarian Syndrome (PCOS) and Kampo, Gynecology and Obstetrics 42: 201-208, 1990

Patients non-responsive to western medical therapies for infertility are treated with Kampo medicines, which often successfully lead to pregnancies. Generally, *Angelica and Peony Powder*, *Cassia Twig and Tuckahoe Pill*, *Peach Kernel Purgative Decoction*, *Warm the Menses Decoction*, *Modified Merry Life Powder*, *Minor Middle-Strengthening Decoction*, *Ten Strong Tonic Herbs Decoction* and similar preparations are used. Infertility in patients with hypertestosteronemia or hyperprolactinemia is treated with *Peony and Licorice Decoction*, which reportedly leads to a significant reduction in the concentration of both hormones[18,19]. Moreover, in patients with antibodies against sperm, treatment with *Minor Bupleurum Decoction, Poria Powder with Five Herbs* has been reported[20]. Please refer to the section on urogenital diseases regarding male infertility.

18) Yanaginuma T., Okamura T., Takeuchi T. et al.: Blood Androgen Concentration Lowering Effects of *Peony and Licorice Decoction* in Women with Hypertestosteronemia, Ovulation inducing effects and safety - multi-facility joint study, Journal of the Japan Society of Infertility 33: 606-616, 1988

19) Ito N., Omi Y., Inazawa N. et al.: Experiences with *Peony and Licorice Decoction* in Women with Latent Hyperprolactinemia, Practice of Gynecology and Obstetrics 49: 1161-1164, 2000

20) Kano T., Furudo M., Okuyama K. et al.: Causes of Infertility in our Clinic and Analysis of Treatment Results Obtained Mainly with *Minor Bupleurum Decoction, Poria Powder with Five Herbs*, Japan Infertility Journal 38: 671-679, 1993

Generally, menopausal syndrome is treated with hormone therapy, but many physicians also consider Kampo medicine to be a treatment of first choice. According to an investigation by Margaret Lock, there

are major differences between symptoms reported by Americans and Europeans on the one hand and Japanese women on the other. Japanese women allegedly suffer from a greater variety and more severe symptoms[21]. This is an appropriate view and in Japan there is abundant experience with the application of Kampo medicines that are used for very minutely tuned treatments[22]. For hot flashes, *Modified Merry Life Powder*, *Coptis Detoxificating Decoction*, *Bupleurum plus Dragon's Bone and Oyster Shell Decoction*, *Bupleurum Cassia Twig and Dried Ginger Decoction*, *Warm the Menses Decoction* and similar preparations, as well as for numerous indefinite complaints other than the above listed formulas. Drugs like *Pinellia and Magnolia Decoction*, *Cyperus and Perilla Leaf Powder*, *Tangerine Peel, Pinellia Rhizoma plus Liver-Inhibiting Powder*, *Cold Limbs Powder*, *Goddess Powder, Modified Back to the Spleen Decoction*, *Uncaria Powder* etc. are also selected depending on the presenting pattern. There are also a number of clinical studies[23,24,25,26,27,28,29,30]. The osteoporosis associated with menopause is basically considered to be a kidney deficiency and thus treated using *Kidney Qi Pill*, *Six Ingredient Pill with Rhemannia* and similar preparations[31]. One report states that *Kidney Qi Pill* is effective for the treatment of senile vaginitis[32].

21) Lock M.: Mythologies of Menopause in Japan and North America 1993

22) Ushiroyama T.: Kampo Therapy for Climacteric Disorders, Kampo Therapeutic Manual for Physicians Specializing in Gynecology (Nagai Publications): 50-55, 2003

23) Maruo T., Katayama K., Mochizuki M. et al.: Kampo Therapy for Climacteric Disorders - in particular examination of the usefulness of *Cassia Twig and Tuckahoe Pill*, Gynecology and Obstetrics 45: 167-176, 1993

24) Morioka N., Wakatsuki A., Sagara Y. et al.: Effects of *Modified Merry Life Powder* on Climacteric Disorders, Progress of Kampo Research in Gynecology and Obstetrics 12: 79-85, 1993

25) Koyama T., Aso T.: Kampo Therapy for Women in Effulgant Fire Age, Evaluation using simplified climacteric indices, Progress of Kampo Research in Gynecology and Obstetrics 9: 30-34, 1992

26) Tamaya T., Ito M., Ito T.: Unidentified Clinical Syndrome, in Particular Investigation of the Usefulness of Kampo Preparations for Climacteric Disorders (*Bupleurum Cassia Twig and Dried Ginger Decoction*, *Modified Merry Life Powder*, *Bupleurum plus Dragon's Bone and Oyster Shell Decoction*), Kampo Medicine (Jap. Journal of Oriental Medicine) 44: 71-81, 1994

27) Nishimura K., Umekawa T., Kanazawa K. et al.: Experiences with *Uncaria Powder* for the Treatment of Climacteric Disorders, Progress of Kampo Research in Gynecology and Obstetrics 17: 125-127, 2000

28) Chimura T., Nakahara K., Miyata R. et al.: Clinical Effects of *Modified Merry Life Powder* on Indefinite Complaints During Climacteric Disorders, Medical Care and New Drugs 27(11): 18-24, 1990

29) Chimura T., Koseki K., Sanjo N. et al.: Clinical Effects of *Modified Merry Life Powder* on Indefinite Complaints During Climacteric Disorders (II), Medical Care and New Drugs 29(3): 145-151, 1992

30) Sagara Y., Morioka N., Wakatsuki A.: Experiences with *Modified Merry Life Powder* for the Treatment of Climacteric Disorders - In particular regarding evaluation methods of combinations of subjective and objective symptoms - Gynecology and Obstetrics 60(2): 290-296, 1993

31) Ushiroyama T.: Kampo Therapy of Elderly Women - Urinary incontinence, arteriosclerosis, osteoporosis - Kampo Therapeutic Manual for Physicians Specializing in Gynecology (Nagai Publications): 89-94, 2003

32) Inoue S., Ueno T., Kusanishi H. et al.: Therapeutic Effects of *Six Gentlemen Decoction* on Senile Vaginitis, Progress of Kampo Research in Gynecology and Obstetrics 17: 140-145, 2000

13. Obstetrics

Medical questions related to pregnancy and childbirth have since ancient times been discussed separate from other issues. In medical schools established in the 8th century, women specialists were trained in this field. Since the 15th century, obstetrics was separated from the other medical specialities and relevant specialists engaged in comparatively high levels of medical practice. Marked progress was achieved after the emergence of the aforementioned Kanetsu Kagawa in the 18th century.

Pregnancy is associated with various disorders that are treated with Kampo medicines[1]. For example, for the treatment of the common cold during pregnancy, *Cyperus and Perilla Leaf Powder* or *Cassia Twig Decoction* are used instead of modern prescriptions. *Minor Pinellia Decoction plus Tuckahoe* or *Pinellia and Magnolia Decoction* have been used for morning sickness. Cough during pregnancy has been treated with *Dwarf Lilyturf Decoction*. *Angelica and Peony Powder* is administered by Japanese physicians to ensure an uneventful pregnancy and Nakata et al. reported "its administration during pregnancy resulted in a 100% safe delivery ratio"[2]. They also reported that for "patients visiting our clinic because of their inability to conceive or the occurrence of spontaneous abortions early after conception, e.g., patients with so-called "habitual abortion", *Angelica and Peony Powder* is extremely effective, so that 4 out of 5 patients were safely able to conceive and deliver a child". Also, due to its inhibition of uterine contractions, this preparation is expected to be effective for the treatment of threatened abortion[3].

Therapeutic attempts have been made with Kampo medicine for Preeclampsia. The results of observations of the effect of *Angelica and Peony Powder* in 5,000 pregnant women reported by Noguchi et al. showed that in the treatment group the incidence of preeclampsia decreased significantly[4]. Kampo medicines, including mainly diuretic preparations, will be helpful for the prevention of this condition.

Szechwan Lovage and Angelica Decoction for Regulating Blood Flow is used to regulate the physical condition following delivery. This preparation, with its blood activating and stasis resolving properties, was developed by a famous physician in China of the Ming period to treat various postpartum symptoms. Later this concept was inherited in Japan and thus led to its present use. There are a number of case reports[5].

1) Ushiroyama T.: Pregnancy and Kampo, Kampo Therapeutic Manual for Physicians Specializing in Gynecology (Nagai Publications) P50-55, 2003

2) Nakata K., Yamaoka K., Konishi E. et al.: Clinics of *Angelica and Peony Powder*, Kampo Medicine (Jap. Journal of Oriental Medicine) 28(3): 101-107, 1978

3) Chimura T. et al.: Effects of Treatment with *Angelica and Peony Powder* for Threatened Abortion, Gynecology and Obstetrics 41(8): 722-731, 1989
4) Noguchi K.: Investigation of Patients with Preeclampsia Over the Past 10 Years in our Clinic, in particular regarding the administration of Kampo medicine and maternal classes, Jap J Prim Care 8: 131-133, 1985
5) Kiuchi C.: Case Report: *Szechwan Lovage and Angelica Decoction for Regulating Blood Flow*: The Kampo for the Practical Physician, No. 6: 11-13, 2000

14. Arthritis and Musculoskeletal Disorders

Many of these disorders are associated with pain. Among patients consulting medical facilities specializing in Kampo therapy, the most frequent complaint is pain associated with the locomotor system. The cervical syndrome, periarthritis humeroscapularis (frozen shoulder), low back pain, sciatica, gonarthrosis and similar disorders are all good indications for acupuncture therapy and equally good indications for Kampo therapy.

Osteoarthropathy (osteoarthritis) is in daily life a commonly observed disorder. Among the patients seeking Kampo therapy, gonarthrosis is the most frequent disorder and represents, unless the deformity has reached a rather extreme degree, a good indication for Kampo therapy[1,2]. The nature of this disorder in the initial phase is mainly a dysregulation of water metabolism, so that treatment results with preparations suitable for the presenting pattern, even if it is associated with the development of hydrarthrosis, are comparatively good. *Cassia Twig plus Yu Bi Decoction* and *Stephania and Astragalus Decoction* are widely used preparations and often rather effective. A number of cumulative studies dealing with *Stephania and Astragalus Decoction* show that the addition of Hobushi (prepared aconite tuber) powder apparently improved the efficacy[3]. Cumulative studies about *Yue Bi Decoction for Relieving Edema plus Atractylodes* showed significant improvements in clinical findings and results of synovial fluid examinations of patients presenting with local heat sensation, swelling and tenderness of the joints[4]. When these diseases run a somewhat protracted course, blood stasis develops and thus makes blood activating and stasis resolving preparations like *Cassia Twig and Tuckahoe Pill, Szechwan Lovage and Angelica Decoction for Regulating Blood Flow* necessary[5]. In case of severe pain, aconite tuber is added.

When the disease has been present for a certain period and is associated with severe deformations, acupuncture treatment or blood letting is used concomitantly. Naturally, inclusion of these treatment forms is recommended right from the beginning.

1) Nagao K.: Comprehensive Oriental Medical Therapy of Gonarthrosis, Kampo and Most Advanced Therapies 5(4): 343-348, 2000
2) Nishizawa Y., Nishizawa K., Amenomori Y. et al.: Analgesic Effects of Anti-inflammatory drugs and Kampo Preparations for Bilateral Gonarthrosis - Comparison of the capability for continuous locomotor function and improvement of the quality of life, Pain and Kampo Medicine 8: 17-32, 1998
3) Otani T., Matsumoto H., Kawakubo M. et al.: Clinical Effects of *Stephania and Astragalus Decoction* on Gonarthrosis, Journal of the Tokyo Knee Society, The Tokyo Journal of Knee Joint 18: 31-33, 1998
4) Sugiyama S.: Effects of *Yue Bi Decoction for Relieving Edema plus Atractylodes* for Gonarthrosis, Kampo Medicine (Jap. Journal of Oriental Medicine) 48(3): 319-325, 1997
5) Matsumoto K.: Explanation of Kampo Preparations, *Szechwan Lovage and Angelica Decoction for Regulating Blood Flow* - First modification - On Blood Stasis, Oriental Medicine 8(6)

The use of *Stephania and Astragalus Decoction* in patients in whom hydrarthrosis developed following surgical removal of the lateral meniscus under orthoscopic observation reportedly led to favorable results[6].

6) Otsuka K.: Effects of *Stephania and Astragalus Decoction* in Patients After Knee Surgery, Kampo Igaku 25(1): 15-17, 2005

Among the crystal arthropathy forms, gout is the disease that is most frequently observed. Kampo therapy is somewhat effective for acute attacks. The pathology is viewed as damp heat and the preparations *Yue Bi Decoction for Relieving Edema plus Atractylodes* and *Gentian Liver-Purging Decoction* are widely used for this condition. In case of severe pain the treatment is combined with western medical measures, but the independent use of Kampo is quite effective and it remains useful even after the most severe pain has subsided. Continuous use of the preparation therefore, provides comparatively quick relief of both swelling and pain. Currently, no preparations have been reported, that would be able to definitively decrease the hyperuricacidemia. Yet, there are some theoretical hypotheses and a few case reports.

Neck pain is a frequently observed condition among the pain syndromes. In Japan, this is often called the cervical syndrome. Chronic neck pain in most cases is caused by osteoarthropathy and is generally subject to conservative therapy. Yet, this is a good indication for acupuncture therapy. With this treatment modality, pain is frequently relieved after short treatment periods.

Kampo therapy appears to be extremely useful. The muscles of the neck and shoulder are associated with the greater and brighter yang areas, so that *Pueraria Decoction* by itself may be used to improve pathologic conditions in these regions. Modifications obtained by addition of Sojutsu or Bushi are also frequently used. Nishina administered *Pueraria Decoction* to a total of 78 patients, including 41 patients with cervical spondylosis, 31 patients with cervical syndrome, 3 trauma patients and 3 patients with other conditions and reported, that under suitable conditions the treatment was effective in two thirds of the patients[7]. Beside from *Pueraria Decoction*, *Cassia Twig Decoction plus Atractylodes and Aconite*, *Channels-Dredging and Blood-Activating Decoction*, *Swordlike Atractylodes and Largehead*

Atractylodes Decoction, *Coix Seed Decoction* and similar preparations are also used.

7) Nishina F.: *Pueraria Decoction* and the Pulse in Orthopedic Diseases, Kampo Therapy Vol. 4, No. 3: 48-50, 1985

Reference

Although almost unnoticed in America and Europe, "stiff shoulders" is an extremely important symptom in Japan. An often asked question is, whether the concept of "shoulder stiffness" is prevalent in Japan. Numerous works deal with this symptom and researchers like Kuriyama have discussed this from a historical point of view, which is of great interst from the perspective of current Kampo medicine[8]. In modern Japan this symptom frequently observed in daily practice is not a disease, but still disturbs daily life. Many researchers also view this condition as the preliminary stage for the development of other diseases. For example, the associated symptom of hypertension, one of the symptoms preceding stroke (when the muscles of the neck stiffen, this may interfere with the blood flow from the neck and thus lead to congestion of cerebral venous system and thus eventually to vessel rupture). Treatment of shoulder stiffness associated with cervical syndrome may help to improve the aforementioned conditions, so that this is a very important symptom. Naturally, acupuncture treatment and blood letting can provide instant relief, but Kampo medicine can be very effective too. The most commonly used preparation is Pueraria Decoction. A number of studies have thermographically investigated the effect of this formula on shoulder stiffness[9].

8) Kuriyama S.: Reflections on Shoulder Stiffness, edited by Yamada, Kuriyama: Disease and Medicine in History, 37-62, Shibunkaku Publications 1997

9) Yakubo S., Komaki K., Yagi H. et al.: Improvement of *Shoulder Stiffness Using Pueraria Decoction* and Thermographic Investigations, Kampo Medicine (Jap. Journal of Oriental Medicine). 47(5): 795-802, 1997

Whiplash injuries are a relatively common trauma of the neck. If the initial treatment is not successful, it may result in a protracted course of the condition which consists of a mixture of psychosomatic symptoms that may prove to be difficult to heal. There are a number of good Kampo preparations for this condition. During the acute phase, the conditions are considered to be characterized by blood stasis. In order to expel the formed blood stasis from the body, preparations also including cathartics like *For Contusion Decoction* or *Dreging and Dissipating Powder*, are used. The chronic phase is considered to be characterized by Qi stagnation and blood stasis and thus *Modified Merry Life Powder* is used. When dampness accumulates within the muscles of the neck, preparations like *Pueraria Decoction*, *Cassia Twig Decoction plus Atractylodes and Aconite* or *Swordlike Atractylodes and Largehead Atractylodes Decoction* are used.

Scapulohumeral periarthritis (frozen shoulder) is a fairly common condition among Japanese and most are probably due to disorders of the rotator cuff. It occurs comparatively frequently in both men and women over the age of 40. Based on the age of onset, the condition is popularly called "50-year-old Shoulder" (pain in the shoulders around the age of 50). This too is a good indication for acupuncture treatment and can effectively be supplemented by Kampo medicine[10]. For neck pain preparations like *Pueraria Decoction plus Atractylodes and Aconite*, *Cassia Twig Decoction plus Atractylodes and Aconite*, *Swordlike Atractylodes and Largehead Atractylodes Decoction* or *Coix Seed Decoction* are used. For cases of long standing, the presence of blood stasis is considered, so that the aforementioned drugs are used in combination with blood activating and stasis resolving preparations like *Cassia Twig and Tuckahoe Pill*.

10) Ogawa H.: Scapulohumeral Periarthritis and Cervical Spondylosis, Kampo and Most Advanced Therapies, 9(3): 229-234, 2000

For low back pain, acupuncture is the treatment of first choice and supplemented by Kampo medicine; but the latter is also very effective by itself. Yet, both effectiveness and the choice of preparations vary depending on the etiology[11,12]. Even in cases of herniation of a lumbar intervertebral disk associated with radicular pain, treatment with Kampo medicine may help to alleviate the symptoms. Among extract preparations, *Cassia Twig and Tuckahoe Pill*, *Evodia, Fresh Ginger plus Chinese Angelica Cold Limbs Decoction*, *Kidney Qi Pill*, *Channels-Dredging and Blood-Activating Decoction*, *Powder for Five Kinds of Stagnations* etc. and among the decoctions *Yin-Tonifying Decoction*, *Angelica Pubescens and Sanjisheng Decoction* and similar preparations are used. In cases of severe pain, the addition of aconite tuber may be required.

11) Fukuda Y.: Kampo Therapy for Low Back Pain and Lumbar Spondylosis, Kampo and Most Advanced Therapies 5(4): 359-362, 1996

12) Shirafuji T.: Kampo Therapy for Neuralgia (including herpes zoster), Modern Oriental Medicine 14(2): 35-39, 1993

For the treatment of low back pain due to lumbar spinal canal stenosis, *Kidney Qi Pill* has been used and cumulative studies showed an efficacy of 68%, while similar cumulative studies with *Life-preserving Kidney-Qi Pill* showed an efficacy of 55%, thus a high efficacy for either of these formulas[13,14].

13) Hayashi Y., Saito E., Takahashi O.: Usefulness of *Kidney Qi Pill* for the Treatment of Lumbar Spinal Canal Stenosis Geriatr. Med. 32(5): 585-591, 1994

14) Yamagami H., Hashizume K., Sakamoto T. et al.: Effects of *Life-preserving Kidney-Qi Pill* in the Treatment of Lumbar Radicular Pain - with particular focus on variations in subjective and objective symptoms, Pain and Kampo 7: 25-28, 1997

The concept of autoimmune disease did not exist in TCM. Yet, for articular rheumatism, a representative disease of this group, many therapies have been devised. The other forms of connective tissue diseases were almost not recognized and probably only individual symptoms were dealt with. Currently, better therapies for these diseases are available than before.

Rheumatoid arthritis (RA) is a disease for which Kampo offers hope. This disease includes various types, stages and grades. Based on these, the prognosis changes, Kampo therapy is particularly effective

during the initial stages of RA. Early diagnostic criteria for ARA showed that the probability for people who were suspected of having RA, the number of patients in a Kampo treatment group (in whom the diagnosis of RA was definitely established) after several years, reportedly appeared to be lower than in a group of patients not treated with Kampo[15]. Besides this report, there is an abundance of other reports that also provide similar suggestions[16,17,18].

Traditionally, the symptoms of RA are considered to be due to the intrusion of the three evils wind, cold and dampness in the body. Clinically, these symptoms also include a feeling of heat in the joints, so that the symptoms are also often viewed as heat symptoms. Choice of the prescription has to be modified depending on the degree of pain, heat sensation and the general condition. For the therapy, basic preparations like *Cassia Twig Decoction plus Atractylodes and Aconite*, *Cassia Twig Peony, and Anemarrhena Decoction*, *Two-parts Cinnamon Twig Decoction and One-part Maidservant from Yue Decoction*, *Stephania and Astragalus Decoction*, *Disband Painful Obstruction Decoction* are used and then modified depending on the relevant considerations of cold and heat factors. Usually this disease can not be properly treated with extracts, so that many physicians use the corresponding decoctions. In particular, the skillful application of *Wild Aconite Tuber* constitutes a key point of the therapy and specialized physicians conduct the therapy by exactly controlling the amount of alkaloids like aconitine and mesaconitine. Some RA case reports have described dramatic improvements by using formulas containing comparatively large amounts of *Wild Aconite Tuber*[19]. There are some cumulative studies dealing with *Minor Bupleurum Decoction, Poria Powder with Five Herbs* or *Stephania and Astragalus Decoction*[20,21,22].

15) Ebe K.: New Cases of Chronic Rheumatoid Arthritis, Investigation of 10 cases, Φυτο 1(4): 4-12, 2001

16) Haimoto H.: Recent Situation Regarding Chronic Rheumatoid Arthritis, Clin. J. Trad. Chin. Med. 18(4): 370-381, 1997

17) Fukuda Y.: 54th Academic Conference of the Japan Society of Oriental Medicine, Academic Symposium: Kampo Therapy for Rheumatoid Arthritis, 1. Probing the possibilities of Kampo preparations, Kampo Medicine (Jap. Journal of Oriental Medicine) 54(6): 1064-1067, 2003

18) Nagasaka K., Hikiami H., Tatsumi T. et al.: Examination of 43 Patients with Chronic Rheumatoid Arthritis, Kampo Medicine (Jap. Journal of Oriental Medicine) 51(2): 241-246, 2000

19) Furuta K., Mitsuma T., Shintani T. et al.: Three Cases of Dramatic Improvements Associated with Poisoning Symptoms Using Uzu Containing Preparations, Kampo Medicine (Jap. Journal of Oriental Medicine) 50(2): 247-255, 1999

20) Matsuura M.: Effects of *Minor Bupleurum Decoction, Poria Powder with Five Herbs* in the Treatment of Chronic Rheumatoid Arthritis (RA), Recordings of the 10th Clinical Wakan Yaku Research Group Modern Physician, 14: 403-408, 1994

21) Borijini, M. J. et al: TJ-114(*Minor Bupleurum Decoction, Poria Powder with Five Herbs*), an herbal medicine in rheumatoid arthritis. A preliminary "go-no go" clinical trial. J. Clin.Rheumatol 2: 309-316, 1996

22) Tanaka M., Ono S., Suzuki T. et al.: Usefulness of *Stephania and Astragalus Decoction* for the Treatment of Chronic Rheumatoid Arthritis, Journal of the Japan Society of Oriental Medicine 40: 73-77, 1989

Regarding other connective tissue diseases like SLE, PSS or SSc, Kampo therapy is added to the respective western medical therapies, but so far there are only a few reports[23,24,25].

23) Ono S.: Kampo Therapy for Systemic Lupus Erythematodes, Kampo and Most Advanced Therapies 2(4): 333-339, 1993

24) Imadaya A.: Withdrawal from Steroid Therapy Facilitated by Kampo Therapy, a case of Long-term Remission in a Patient with Systemic Lupus Erythematodes, The Journal of Traditional Sino-Japanese Medicine 104, 1989

25) Matsuda K.: Therapeutic Guidelines for Kampo Health Care Services, Progressive Systemic Scleroderma (PSS), revised edition (Organization: Japan Society of Oriental Medicine): 199-202, 1993

Behcet's disease, with its aphthous ulcers of the oral mucosa, genital ulcers and skin symptoms, can be sufficiently treated with Kampo medicine and is thus a comparatively good indication for this treatment modality. Generally, *Warming and Clearing Decoction*, *Ten Strong Tonic Herbs Decoction*, *Modified Merry Life Powder* and similar preparations are used. For the oral lesions, *Coptis Detoxificating Decoction* or *Licorice Decoction* are taken into the mouth, in such a way that the drugs come in contact with the affected sites before swallowing. For *Warming and Clearing Decoction* there are placebo controlled clinical trials and case series studies[26,27].

26) Kaneko F.: *Warming and Clearing Decoction* for the Treatment of Behcet's Disease, Prog. Med. 6: 384-386, 1986

27) Hashimoto T., Takeuchi A., Mori S. et al.: Clinical Effects of *Warming and Clearing Decoction* for the Treatment of Behcet's Disease, Therapy and New Drugs 20(10): 2283-2285, 1983

Kampo therapy has also been tried for the treatment of Sjögren's syndrome, for dryness of the oral cavity and the eyes. Basically, dryness is considered to be due to a lack of fluids and therefore Yin tonifying formulas are administered. *Dwarf Lilyturf Decoction*, *Ginseng Nutrition Decoction*, *Bupleurum Cassia Twig and Dried Ginger Decoction* and similar preparations are comparatively well used. There are comparative trials and case series studies using *Dwarf Lilyturf Decoction*, as well as multi-center case series studies using *Ginseng Nutrition Decoction*[28,29,30].

28) Ono S., Suzuki T., Doi Y.: Effects of *Dwarf Lilyturf Decoction* on Disorders of Saliva Secretion in Sjögren Syndrome, Rheumatism 30: 10-16, 1990

29) Tonotsuka N., Abe M., Tahara K. et al.: Effects of *Dwarf Lilyturf Decoction* on Dryness of the Eyes in Sjögren's Syndrome, Journal of the Society for Wakan Yaku 6: 436-437, 1989

30) Yokohari R., Kishimoto S., Tanimoto K. et al.: Clinical Effects of *Ginseng Nutrition Decoction* (EK-108) on Dryness of the Eyes and the Oral Cavity in Sjögren's Syndrome, Clinical Medicine and Pharmacology 9: 1959-1968, 1993

15. Kidney

Kidney diseases are often associated with edema. Yet, examination of literature older than 100 years, makes the distinction of whether the edema mentioned in the relevant works is due to cardiac or renal diseases difficult. Naturally, at that time, the histologic identification of the lesions had not yet been possible so that application of records of those days to

current clinical practice, with a few exceptions, is difficult. On the other hand, there is a growing trend in recent years to apply the data of hematologic examinations and histopathologic findings to Kampo clinical practice.

Chronic renal diseases remain difficult to treat with western medicine and in the end have to rely on dialysis. Kidney transplantations are performed in Japan, but the number of cases is small. A variety of different approaches to these diseases using Kampo therapy have been attempted, and among these, some epoch-making forms have received considerable public attention. Yet, for these attempts, no extracts were used. Rather large amounts of crude drugs were selectively administered in special treatment forms.

First, it has been proven that creatinine levels decrease in response to treatment with large amounts of astragalus(milk-vetch) root. Haimoto discovered during the treatment of several patients with chronic renal insufficiency that among numerous crude drugs, astragalus root is independently capable of decreasing the creatinine level[1]. Moreover, treatment results indicated that efficacy improves even further by adding red peony root. Conversely, Ebe devised, based on his own original theory and again centering on astragalus root formulations, a mixture made up of different crude drugs (red peony root, rhubarb rhizoma, trichosanthes seeds, pinellia tuber) with similar effects and has already used this formula for several dozens of patients[2,3]. Among these there is a substantial number of patients in whom the start of the dialysis treatment could be significantly delayed or else the frequency of the required dialysis sessions decreased.

The findings obtained from these studies indicated that rhubarb apparently decreased BUN and creatinine[4,5,6,7]. According to relevant clinical and experimental research, these effects have been verified. Traditionally, *Poria Powder with Five Herbs*, *Separate and Reduce Decoction*, *Bolster the Spleen Decoction*, *Middle-Reinforcing and Dampness-Removing Decoction*, and similar preparations have been used as diuretics. With a few exceptions, sufficient efficacy was observed only in rare cases. In recent years, based on Chinese experiences, the combination of Houttuynia herb, astragalus radix and imperatae rhizoma has proven to be effective. Recent follow-up studies from Japan yielded similar results. This drug mixture too is used as a decoction and appears to be effective[8].

Kampo medicine can be used for various conditions in dialysis patients. For example, *Warming and Clearing Decoction* is administered for dermal pruritus developing in patients undergoing dialysis and its efficacy has been shown in case studies[9]. *Peony and Licorice Decoction* is administered for muscle cramps and case studies[10] have shown an efficacy of 88.5%. Case studies regarding the use of *Minor Bupleurum Decoction plus Poria Powder with Five Herbs* for osteoarthritis related to dialysis[11,12] have shown an efficacy of 61%. In any case, the usefulness of Kampo medicines was very good.

1) Haimoto H.: Efficacy of Astragalus Root in Decreasing Serum Creatinine Levels in Chronic Renal Failure, Φ υ τ ο 7(1): 4-9, 2005
2) Hashimoto M., Ebe Y.: Kampo Therapy for Chronic Renal Failure (1) Clinical Journal of Traditional Chinese Medicine 25(4): 482-487, 2004
3) Hashimoto M., Ebe Y.: Kampo Therapy for Chronic Renal Failure (1) Clinical Journal of Traditional Chinese Medicine 26(1): 88-94, 2005
4) Oura H., Yokozawa T.: Pharmacologic Action and Effects of Rhubarb The Journal of Traditional Sino-Japanese Medicine 12(2): 87-92, 1991
5) Tarasawa K., Shibahara N.: the Role of Kampo Therapy in the Treatment of Renal Diseases - Opinions by Kampo Experts, Kampo & the Newest Therapy 8(2): 101-105, 1999
6) Oura H., Yokozawa T.: Efficacy of Japanese and Chinese Medicine (Wakan Yaku) in the Treatment of Experimental Renal Failure - Kidney and Dialysis (Extra Edition) 26: 38-42, 1989
7) Mitsuma T. et al.: Research into Rhubarb and Rhubarb Containing Kampo Preparations for the Treatment of Chronic Renal Failure (Second Report), The Japanese Journal of Nephrogy 29: 195-207, 1987
8) Haimoto H. et al.: Traditional Chinese Treatment of Chronic Nephritis and Nephrotic Syndrome, The Kampo 14(3): 62-68, 1996
9) Arisaka M., Kusano E., Asano Y. et al.: Clinical Experiences with the Use of Onsei In for the Treatment of Pruritus in Dialysis Patients, Kidney and Dialysis 35: 565-569, 1993
10) Kumakura M., Hyodo T., Tomimitsu E. et al.: Fast-acting Properties of *Peony and Licorice Decoction* for Muscle Cramps in Dialysis Patients, Dialysis Care 6: 75-79, 2000
11) Oka Y., Miyazaki M., Takatsu S. et al.: Importance of Early Discovery of Osteoarthritis in Dialysis Patients - Study of the Usefulness of *Minor Bupleurum Decoction, Poria Powder with Five Herbs*, Journal of the Japan Dialysis Society 33: 1371-1376, 2000
12) Takasu S., Hatamura T., Sasahara K.: Clinical Effects of *Minor Bupleurum Decoction, Poria Powder with Five Herbs* on Osteoarthritis in Dialysis Patients, Kampo Shinryo 15: 18-21, 1996

The concept of glomerular nephritis was established in recent years. Moreover, this disease was only treated when it was associated with such macroscopically visible anomalies of the body like edema. Today, in addition to the aforementioned sign, abnormal biochemical data, proteinuria or hematuria (including microscopic hematuria) have become treatment indications and the range of treatment indications for Kampo medicine has also been broadened.

Acute postinfectious glomerular nephritis used to be a frequently observed disease, but today its incidence has decreased due to the wide spread use of antibiotics, so that the chances to treat the condition with Kampo have diminished. Some forms of IgA nephropathies respond well to Kampo therapy and there are RCTs verifying this finding[13]. Nephrotic syndrome is a disease for which Kampo medicine has been used widely and even today continues to be under used, although under fairly restricted conditions. Histopathologic examination shows that disorders of the minimal change group and membranous nephropathy respond well to Kampo medicine. There are relevant data regarding the use of *Minor Bupleurum Decoction, Poria Powder with Five Herbs*[14,15,16,17]. Moreover, a combination of the above mentioned Houttuynia cordata, astragalus radix and imperata rhizoma is effective for the treatment of edema and proteinuria, characteristics of this disease.

13) Yoshikawa N., Ito T., Sakai T. et al.: Prospective Controlled Study Using *Minor Bupleurum Decoction, Poria Powder with Five Herbs* for the Treatment of Pediatric IgA Nephropathy with Focal, Minimal Mesangial Proliferation, The Japanese Journal of Nephrogy 39: 503-556, 1997
14) Tojo S., Yoshitoshi Y., Nagasawa T. et al.: Ethical Kampo Preparations for Chronic Glomerular Nephritis and Nephritic Syndrome: Clinical Effects of *Minor Bupleurum Decoction, Poria Powder with Five Herbs* (First Report), Multi-facility Open Trial, Kidney and Dialysis 31(3): 613-625, 1994
15) Ito K., Okada T., Kitagawa T. et al.: Ethical Kampo Preparations for Pediatric Chronic Glomerular Nephritis and Nephritic Syndrome: Clinical Effects of *Minor Bupleurum Decoction, Poria Powder with Five Herbs*, Multi-facility Open Trial, Kidney and Dialysis 36: 1237-1246, 1994
16) Yoshikawa T., Ito T., Takekoshi Y. et al.: Pediatric Steroid Reactive Nephritic Syndrome, Initial Steroid Treatment Period and Recurrence in Patients Treated with a *Minor Bupleurum Decoction, Poria Powder with Five Herbs* Combination Therapy - Prospective Controlled Study, The Japanese Journal of Nephrogy 40: 587-590, 1998
17) Yasaki T., Hirose S.: Clinical Effects of *Minor Bupleurum Decoction, Poria Powder with Five Herbs* on Pediatric Nephritic Syndrome, Journal of Traditional Medicine 4: 203-206, 1987

16. Urology

Regarding urologic diseases, ancient textbooks refer to the "Five Lin" (five stranguries): stone, Qi, unctuous, consumptive and bloody Lin. These are general terms for conditions currently designated as cystitis, urinary stones, hematuria, syphilis and dysuria etc. Today, specific therapies have been proposed for these individual conditions and not the traditional concept of "Lin"[1].

1) Ishibashi A.: Kampo Therapy of Urologic Diseases (Continued), for Practical Physicians, The Kampo No.3: 2-7, 1999

Among the urogenital infections Kampo medicine is effective for acute cystitis, but the condition is usually treated with antibiotics. In ordinary clinical practice it is, however, not possible to provide a preventive therapy with antibiotics, so that Kampo therapy is given to those patients for whom the condition has progressed to the chronic stage. *Umbellate Fungus Decoction*, *Combind Umbellate Fungus Decoction and Four Herbs Decoction*, *Gentian Liver-Purging Decoction*, *Powder for Five Kinds of Stranguria*, *Heart-Clearing Lotus Seed Decoction*, *Kidney Qi Pill* are frequently used preparations. There are case series studies dealing with the use of *Combind Umbellate Fungus Decoction and Four Herbs Decoction* for the treatment of ureter syndrome[2].

2) Sugaya K., Nishizawa O., Noto H. et al.: Effects of *Umbellate Fungus Decoction* and *Combind Umbellate Fungus Decoction and Four Herbs Decoction* for the Treatment of Ureter Syndrome, Urology Bulletin 38: 731-735, 1992

Among the forms of bacterial prostatitis, acute infections are an indication for antibiotics. Chronic bacterial prostatitis, nonbacterial prostatitis or the chronic prostatitis syndrome cause similar symptoms for which western medical treatment is not sufficiently effective. For these conditions Kampo therapy is often very effective. *Gentian Liver-Purging Decoction* is frequently used[3]. Combination with *Kidney Qi Pill* may in some cases give better results. Beside these formulas, there are studies dealing with *Life-preserving Kidney-Qi Pill* and *Cassia Twig and Tuckahoe Pill*. Cumulative studies have been performed for *Cassia Twig and Tuckahoe Pill* among the above mentioned preparations and showed effectiveness in 12% and slight effectiveness in 66.4% of the treated patients[4].

3) Takashi M., Haimoto H.: Experiences with Kampo Therapy for Patients with Chronic Prostatitis presenting with a Greasy Tongue Coating, Φυτο 1(2): 16-18, 2001
4) Harada K.: Usefulness of Blood Stasis Expelling Drugs for the Treatment of Chronic Prostatitis - Using Mainly *Cassia Twig and Tuckahoe Pill*, WE No.7: 9-10, 2004

In most cases of urinary tract stones causing colicky pain, Kampo medicine alone cannot provide relief, but there have been many attempts at using it. *Peony and Licorice Decoction*, *Umbellate Fungus Decoction* and *Peony and Licorice Decoction*, *Major Middle-Strengthening Decoction* and similar preparations have been prescribed. A new indication in this field is the excretion of the stone fragments following ESWL (extracorporeal shock wave lithotripsy). For this purpose, the combination of large amounts of fluid replacement with the administration of *Umbellate Fungus Decoction* has been proposed and tested in comparative clinical trials[5].

5) Takada M., Yano H., Kambara N. et al.: Effects of *Umbellate Fungus Decoction* on Post-ESWL stone excretion, Acta Urologica Japonica 43:311-314 1997

Erectile dysfunction in men is not due to a single cause and the indications for Kampo therapy are limited, but it is used for psychogenic or age dependent cases. *Kidney Qi Pill*, *Middle-Reinforcing and Qi-Benefiting Decoction*, *Bupleurum plus Dragon's Bone and Oyster Shell Decoction*, *Cassia Twig plus Dragon's Bone and Oyster Shell Decoction* have been selected and used[6]. *Middle-Reinforcing and Qi-Benefiting Decoction* is frequently used for the treatment of oligospermia or insufficient motility of sperm found in cases of male infertility. Several hours after the administration of *Middle-Reinforcing and Qi-Benefiting Decoction* the number of sperm and sperm motility have been confirmed to markedly increase[7,8]. Preparations like *Kidney Qi Pill* or *Life-preserving Kidney-Qi Pill* have similar modes of action and the latter preparation has been shown in case series studies to increase the number of sperm in case of oligospermia and very efficiently improve motility in asthenospermia[9].

6) Ikeuchi T.: EBM in Kampo Therapy - Current Situation - 3. Overview over the current situation of EBM in various fields, 7) EBM and Renal and Urologic Diseases, Prog. Med. 22(9): 53-56, 2002
7) Li Ping, Takase K., Mukobayashi M. et al.: Clinical Effects of *Middle-Reinforcing and Qi-Benefiting Decoction* in the Treatment of Male Infertility, Progress in Obstetrics and Gynecology 48(4): 406-410, 1996
8) Akiyama M., Oeda T., Akiyama H. et al.: Clinical Experiences with *Middle-Reinforcing and Qi-Benefiting Decoction* in the Treatment of Male Infertility, Chapter of Urology in Western Japan 59(5): 442-446, 1997
9) Ohashi M., Ishikawa H., Yauchihara H. et al.: Efficacy of *Life-preserving Kidney-Qi Pill* in the Treatment of Male Infertility - Seminal Fluid Findings Obtained with an Automatic Seminal Fluid Analyzer, Journal of the Japanese Society of Fertility and Sterility 39(2): 79-83, 1994

The initial stages of prostate hypertrophy are an indication for Kampo therapy. *Kidney Qi Pill* is a frequently used preparation and there are case series studies dealing with its application[10,11]. When treatment with *Kidney Qi Pill* alone is insufficiently effective, the hypertrophy of the prostate gland can be viewed as a manifestation of blood stasis. Some studies demonstrated that treatment with blood activating and stasis resolving preparations like *Cassia Twig and Tuckahoe Pill* or *Rhubarb and Moutan Bark Decoction* (in case of a decoction Choryu To) appears to be beneficial[12].

10) Harada K.: Treatment of Urological Diseases with Japanese and Chinese Medicine; 4. Diseases of the Prostate and Micturation Disorders, Clinical Urology 45: 295-300, 1991

11) Yoshida K., Nakagawa Y., Tani Y. et al.: Clinical Effects of *Kidney Qi Pill* for Prostrate Hypertrophy, The Clinical Report 9: 2861-2870, 1991

12) Yamamoto I.: Outline of Kampo Therapy for Diseases of the Lower Urinary Tract; Miscellaneous Records of Oriental Medicine 3, ("Essays of eastern medicine" Vol.3): 637-648, 1983

Urinary incontinence is frequently observed in elderly patients, particularly in women. It is likely that patients do not report this symptom because of embarrassment. For the treatment of pressure incontinence, the preparation *Middle-Reinforcing and Qi-Benefiting Decoction* with its "upraising" properties is widely used[13]. Kase et al. administered *Middle-Reinforcing and Qi-Benefiting Decoction* to seven patients who did not wish to undergo surgical treatment of pressure incontinence, and evaluated the results with the questionnaire proposed by the International Consultation on Incontinence (ICI). They found that the average incontinence score reportedly dropped from 10.4±3.7 points to 6.3±5.0 points[14]. Moreover, in recent years it has been noticed that *Pueraria Decoction* also has incontinence inhibiting actions. The discovery of this effect was made by Prof. Shin, who found that treatment of female outpatients in an obstetrics and gynecology clinic suffering from common cold with *Pueraria Decoction* resulted in an alleviation of the incontinence occurring simultaneously with the cure of the cold. Prof. Shin conjectured that this effect is probably due to a contraction of the internal cystic sphincter induced by the ephedrine contained in *Pueraria Decoction*, while the component paeoniflorin of peony root seems to induce relaxation of the smooth muscles of the bladder[15]. Impending incontinence is considered to be one pathologic form of kidney deficiency, so that here kidney tonifying preparations like *Kidney Qi Pill* and *Life-preserving Kidney-Qi Pill* are widely used[16].

13) Murakami Y.: Effects of *Middle-Reinforcing and Qi-Benefiting Decoction* on Mobile Kidneys and Pressure Incontinence, Acta Urologica Japonica 34: 1841-1843, 1988

14) Kase H., Akashi M., Sato T.: Effects of *Middle-Reinforcing and Qi-Benefiting Decoction* on Pressure Incontinence, Kampo Igaku 29(3): 19-21, 2005

15) Shin S. et al.: Usefulness of *Pueraria Decoction* on Pressure Incontinence; 47th Conference of The Japan Society for Oriental Medicine, Summary Collection P126, 1996

16) Yamanaka H., Suzuki T., Tokunaga S. et al.: Kampo Therapy for Micturation Disorders, Kampo Igaku 21(8): 2-10, 1977

17. Nervous System

Many diseases in this field are indications for acupuncture therapy, but a combination therapy with Kampo medicine is more effective. Traditionally there has been a lot of experience with stroke and headache. For various forms of degenerative cerebral diseases, Kampo therapy has been effective to a certain extent and today numerous therapeutic trials are performed.

Regarding headache, both tension headache and migraine are both good indications for Kampo therapy. Widely used preparations include *Evodia Decoction*, *Poria Powder with Five Herbs*, *Pueraria Decoction*, *Pinellia, Largehead Atractylodes and Tall Gastordia Decoction*, *Tea-Blended Szechwan Lovage Powder*, *Cassia Twig plus Ginseng Decoction*, *Coptis Detoxificating Decoction* and similar formulas. Each of these preparations are used for corresponding disease states, but the TCM classification may not necessarily always be the same, so that prescriptions may differ. Among these, *Poria Powder with Five Herbs* is a characteristic Japanese formula not found in Chinese textbooks. Haimoto found through skillful application of clinical epidemiologic methods an efficacy of over 90% when the preparation was used for the treatment of headache associated with a drop in atmospheric pressure. The odds ratio of the correlation between headache and the drop in atmospheric pressure was reportedly 16.2[1]. In Japan, *Evodia Decoction* has traditionally been used for the treatment of this condition and there are a substantial number of related studies. A case series study showed better than simple improvements in 77 out of 147 patients[2]. The data of another case series study examining 30 patients with tension headache showed that the treatment was effective in 23 patients (that is an efficacy of 76.3%)[3]. Yet, in actual clinical practice the efficacy does not seem to be that high. Moreover, treatment with this preparation reportedly results in improvements of vascular headache, but statistical differences were not observed. However, sometimes there are cases with dramatic improvement. Case series studies examining the use of *Pueraria Decoction* for the treatment of tension headache showed at the fourth treatment week an efficacy of 66.3%[4]. Some case series studies deal with the treatment of tension headache using *Uncaria Powder*, or else chronic headache in patients with cerebrovascular disorders and reported effectiveness for both conditions[5,6]. Treatment of trigeminal neuralgia follows the therapeutic guidelines for headache.

1) Haimoto H.: Discussion of Clinical Epidemiologic Research into Chronic Headache and the Correlation with Shifting Atmospheric Depressions, Φυτο 1(3): 8-15, 1999

2) Maeda K., Miyagi A., Sugawara T. et al.: Effects of *Evodia Decoction* on Chronic Headache, Kampo Igaku 22: 55-57, 1998

3) Akamine M., Hyoudo Y., Ashihara M. et al.: Usefulness of *Evodia Decoction* for Tension Headache, Japan Oriental Psychosomatic Medical Research 15: 36-38, 2000

4) Yamamoto M.: Clinical Effects of *Pueraria Decoction* on Chronic Tension Headache Caused by Stiffness of Shoulders and Neck, The Japanese Journal of Clinical and Experimental Medicine 72: 1299-1303, 1995
5) Kimura K., Sasao S.: Clinical Effects of Tsumura's *Uncaria Powder* for Chronic Headache in Patients with Cerebrovascular Disorders, Geriat. Med. 27: 445-449, 1989
6) Takada O.: Usefulness of *Uncaria Powder* for Chronic Tension Headache, Kampo Igaku 22: 121-124, 1998

Throughout a lengthy history, a number of different therapies have been administered for epilepsy. During the 18th century in Japan, apart from the ordinary treatment, "vomitting" (intentional induction of emesis) was performed occasionally as part of the therapy, but did not produce sufficient results. Currently, various adapted forms of Kampo therapy are used in conjunction with modern western medical treatment, but independently cannot be expected to be effective. For the treatment of refractory pediatric epilepsy there are reports about using *Minor Bupleurum Decoction plus Cassia Twig Decoction plus Peony*, *Minor Bupleurum Decoction plus Minor Middle-Strengthening Decoction*, *Bupleurum and Cassia Twig Decoction* and similar preparations, where the data indicate an efficacy of 30-70%. For details please refer to the section on pediatrics.

Cerebrovascular disorders have for a long time been recognized as an extremely frequent condition and constituted the number one cause of death in the Japan 50 years ago. Today, in conjunction with the progress in modern medicine, fatal cases have become much rarer, but the incidence of small infarcts and bleedings are still frequent. Additionally, these conditions as a sequela of surgical intervention have emerged as a new pathology. During the acute phase of these diseases, western medical treatment is given priority. Kampo therapy is performed during the acute phase only under special conditions or else during the chronic phase (late effect period). In recent studies, Kimoto administered *Poria Powder with Five Herbs* in order to alleviate cerebral edema immediately following a stroke (including lacunar stroke) and reported achieving a better prognosis than with the ordinary therapy alone[7]. For the treatment of sequelae of this disease (hemiplegia, articulation disorders and the like) acupuncture is very well suited and Kampo therapy is used more supportively. *Coptis Detoxificating Decoction*, *Major Bupleurum Decoction*, *Bupleurum plus Dragon's Bone and Oyster Shell Decoction*, *Uncaria Powder*, *Liver-Inhibiting Powder*, *Angelica and Peony Powder*, *Cassia Twig and Tuckahoe Pill*, *Cassia Twig Decoction plus Atractylodes and Aconite*, *Kidney Qi Pill* and similar preparations are used. In this field many case series studies and randomized controlled trials have been performed[8,9,10,11,12,13,14,15,16].

Regarding treatment with decoctions, further modifications of the therapy have been applied.

7) Kimoto H.: Application of Kampo medicine to acute cerebral infarction: Summary of 14 cases and comparison of their clinical prognosis with the result of Japan Standard Stroke Registry Study (JSSRS) J. Trad. Med. 20(2): 68-73, 2003
8) Ushikubo Y., Sakurai T., Yokouchi T. et al.: Effects of *Coptis Detoxificating Decoction* on Cerebrovascular Disorders and Quantitative Evaluation of Blood Flow, Journal of New Remedies & Clinics 47: 176-183, 1998
9) Ito E., Takahashi A., Kuzuya F.: Clinical Effects of *Coptis Detoxificating Decoction* on Stroke, Geriat. Med. 29: 303-313, 1991
10) Otomo E., Togi H., Kogure K. et al.: Usefulness of *Coptis Detoxificating Decoction* for the Treatment of Cerebrovascular Disorders - Controlled study with Ca Hopantenate as the Control Using the Envelope Method, Geriat. Med 29: 121-151, 1991
11) Araki G.: Effects of *Coptis Detoxificating Decoction* on the Sequelae of Cerebrovascular Disorders - Particularly discussing improvements in cerebral circulation (vertigo, dizziness), Geriat. Med 29: 1587-1599, 1991
12) Ito E., Uchida M., Sakakibara T. et al.: Effects of *North Water God Decoction* on the Sequelae of Cerebrovascular Disorders, The Japanese Journal of Clinical and Experimental Medicine 71: 562-568, 1994
13) Matsushita S., Ueda S., Ouchi Y. et al.: Usefulness of *Uncaria Powder* for the Treatment of Accessory Symptoms of Cerebrovascular Disorders, Chronic Cerebral Circulatory Insufficiency and Hypertension, Geriat. Med 33: 1333-1341, 1995
14) Ito K., Yamamoto H., Nishihara T. et al.: Investigation of the Usefulness of *Kidney Qi Pill* for the Treatment of Various Symptoms in Patients with Hypertension or Cerebrovascular Disorders (excluding the acute phase) - Multi-facility crosover double-blinded trial, Diagnosis and Treatment 76(4): 1096-1114, 1988
15) Fukushima T., Tomonaga M., Tanaka A. et al.: Clinical Effects of *Angelica and Peony Powder* on the Sequelae of Cerebrovascular Disorders, The Japanese Journal of Clinical and Experimental Medicine 71: 1065-1070, 1994
16) Goto H., Shimada Y., Mitsuma T. et al.: Effect of *Cassia Twig and Tuckahoe Pill* on asymptomatic cerebral infarction for short term, J. Trad. Med 19: 46-50, 2002

Regarding cerebrovascular dementia, research about *Uncaria Powder* and similar preparations is progressing. Please refer for further details to the section on mental diseases.

Several preparations have been tried in form of combination therapies with western medical treatment during the initial phase of Parkinsonism. So far, *Liver-Inhibiting Powder* and *Tangerine Peel, Pinellia Rhizoma plus Liver-Inhibiting Powder* are representative formulas[17]. In recent years case series studies with *Coptis Detoxificating Decoction*, *Tea-Blended Szechwan Lovage Powder*, *Six Gentlemen Decoction* and similar formulas have also been performed[18,19,20].

17) Ogawa S.: Purpose and Application of *Liver-Inhibiting Powder* and *Tangerine Peel, Pinellia Rhizoma plus Liver-Inhibiting Powder*, Kampo Medicine (Jap. Journal of Oriental Medicine) 49(3): 330-334, 1998
18) Ito M.: Clinical Experiences with *Coptis Detoxificating Decoction* for the Treatment of Parkinson's Disease, The Clinical Report 26: 1519-1524, 1992
19) Shizuma N., Muramatsu S., Ikeguchi K. et al.: Effects of *Tea-Blended Szechwan Lovage Powder* on the Dyskinesia of Parkinson's Disease, Kampo Medicine (Jap. Journal of Oriental Medicine) 51: 1087-1091, 2001
20) Hiyama Y., Tosa H., Terasawa K. et al.: The effects of *Six Gentlemen Decoction* on Parkinsonian patients with unstable effect of levodopa/carbidopa, J. Med. Pharm. Soc. WAKAN-YAKU 8: 83-88, 1991

Since approximately 60% of the patients with Bell's palsy recover spontaneously without any treatment, many patients do not necessarily require therapy. This condition is a good indication for acupuncture therapy and improvement immediately

after the treatment is not uncommon. Therefore the use of Kampo medicine is not required. Several RCTs have been reported that compare this medication with a steroid group[21,22]. According to these studies, there were not any major differences between the two groups.

21) Horiguchi I., Otake T.: Comparison of the Therapeutic Effects of Steroids and *Minor Bupleurum Decoction, Poria Powder with Five Herbs* on Peripheral Facial Palsy (Bell's Palsy), Kampo & the Newest Therapy 7(4): 363-368, 1999

22) Obata H., Otake T., Ishikura H.: Usefulness of *Minor Bupleurum Decoction, Poria Powder with Five Herbs* for the Treatment of Facial Palsy - A comparison with steroids, Pain Clinic, Pain Clinic 16(1): 49-52, 1995

Occasionally the use of Kampo medicine in the treatment of myasthenia gravis makes a dose reduction in anticholinesterase agents possible. Several case reports indicated the use *Middle-Reinforcing and Qi-Benefiting Decoction* or *Pueraria Decoction* and there is research on the use of *Six Gentlemen Decoction*[23].

23) Oikawa O.: Application of *Six Gentlemen Decoction* in the Field of Neurology, Prog. Med. 23(8): 2163-2169, 2003

18. Psychiatric Disorders

A multitude of mental diseases have been recorded from ancient to modern times. In TCM, various preparations have been devised depending on the state of the relevant disorders. Since there had been no classification of diseases like those used today (for example the DSM classification), it remains difficult to determine what modern disease the disorders described in those days correspond to. The disorders in this field were viewed as anomalies of the Zhang-Fu, the viscera and organs, revealing most often problems of heart, liver, spleen and gallbladder. In the course of the pattern, identification anomalies of these viscera and bowels were found causing the problem. In Japan, the "Shang han lun" or “Jin gui yao lue” offers a diversity of preparations for the treatment of these conditions. Active research into relevant formulas has been conducted since the Tang dynasty and led to suitable applications.

Among common psychiatric disorders, Kampo therapy is used as an integral part of behavior therapy, social therapy, psychotherapy and medical treatment of stress & adjustment disorders (situational disorders). Regarding anxiety disorders, the components of the anxiety may be either psychogenic or somatic. Kampo medicines include preparations capable of reducing the anxiety in itself and are used as a matter of course. It is frequently observed that through improvement of the physical symptoms, the related anxiety is alleviated. For this reason, it is necessary to base the prescription not on disease names, but follow the Kampo medical pattern identification. The most frequently observed general anxiety disorders are often treated with preparations like *Pinellia and Magnolia Decoction*, *Tangerine Peel, Pinellia Rhizoma plus Liver-Inhibiting Powder*, *Bupleurum and Cassia Twig Decoction*, *Bupleurum plus Dragon's Bone and Oyster Shell Decoction*, *Middle-Reinforcing and Qi-Benefiting Decoction*, *Back to the Spleen Decoction*, *Modified Merry Life Powder*, *Cyperus and Perilla Leaf Powder*, *Warm the Gallbladder Decoction, Goddess Powder*, and *Coptis Detoxificating Decoction*. These formulas are also employed for panic disorders and obsessive-compulsive disorders (OCD) and suitable drugs are administered based on the SHO (symptoms and signs). There are a number of case series studies regarding this topic[1,2,3,4,5].

1) Kudo Y., Mori A., Asai M. et al.: Clinical Effects of *Modified Merry Life Powder* for Various Forms of Necrosis, Journal of Clinical Therapeutics & Medicine 8(12): 2989-3007 1992

2) Okamoto K., Hasama T., Okamoto R. et al.: Effects of *Pinellia and Magnolia Decoction* on Neurosis, The Journal of Traditional Sino-Japanese Medicine 15(4): 571-576, 1994

3) Ohara K., Fukazawa H., Suzuki Y. et al.: Clinical Effects of *Bupleurum plus Dragon's Bone and Oyster Shell Decoction* and *Pinellia and Magnolia Decoction* on Neurosis, Journal of New Remedies & Clinics 34(1): 131-141, 1985

4) Shinozaki T.: Effects of *Tangerine Peel, Pinellia Rhizoma plus Liver-Inhibiting Powder* in 30 Neurosis Patients with Irritation as Their Chief Complaint, Kampo Shinryo 18(2): 42-44, 1999

5) Shinozaki T.: Effects of *Bupleurum plus Dragon's Bone and Oyster Shell Decoction* in 15 Neurosis Patients with Irritation as Their Chief Complaint, Kampo Igaku 24(3): 122-124, 2000

Somatoform disorders (abnormal illness behavior) are a group of disorders that are very difficult to conceptualize. Yet, Kampo therapy occasionally appears to be useful. These conditions are not approached directly from their mental aspects, but by relieving physical problems with Kampo therapy the relevant mental conflicts are sometimes relieved. Many Kampo preparations act by improving physical dysfunction and are administered in order to improve the physical disposition of the patients. For chronic pain disorders, Kampo therapy does not appear to be very effective. However, it can in rare cases, be effective when the pathology is properly identified according to Kampo medical concepts.

To date no systematic studies on the application of Kampo therapy for schizophrenic disorders have been performed. Yet, there are a number of accessory approaches. One of these was the administration of *Coptis Detoxificating Decoction* to 10 patients in whom symptoms had been stabilized through treatment with antipsychotic drugs, where subsequently during the observation period an improvement in the total score of the brief psychiatric rating scale (BPRS) was noted. This took the form of significant improvement in depressive moods, delusions of guilt, delusions of persecution and agitation[6]. Another approach was the treatment of 12 patients complaining of mild to moderate restlessness with *Kidney Qi Pill* extract. The observation of the four parameters: loss of motivation, anxiety, restlessness and depressive moods, showed significant improvement[7].

6) Yamada K., Kamba S., Onishi M. et al.: Clinical Effects of *Coptis Detoxificating Decoction* During Convalescence From the Active Phase of Schizophrenia, Kampo Medicine (Jap. Journal of Oriental Medicine) 47(4): 603-607, 1997

7) Ozaki S., Morita H., Shimomura Y.: Clinical Effects of *Kidney Qi Pill* and Needling of the Back on Schizophrenia (inhibition of auditory hallucinations through kidney tonification), Oriental Medicine 21(3): 69-75, 1993

Among mood disorders (depression & mania), history shows a comparatively large number of attempts at using Kampo therapy for depression which led to the selection of several effective preparations. Clinically, these are effective when used in the form of combination therapies with western medications. *Middle-Reinforcing and Qi-Benefiting Decoction*, *Modified Back to the Spleen Decoction*, *Pinellia and Magnolia Decoction*, *Cyperus and Perilla Leaf Powder*, *Six Gentlemen Decoction*, *Minor Middle-Strengthening Decoction*, *Ginseng Nutrition Decoction*, *Bupleurum plus Dragon's Bone and Oyster Shell Decoction* and similar preparations are used. There are also case series studies for these formulas[8,9,10,11].

8) Ohara K., Nishimoto M., Miyasato K. et al.: Effects of *Middle-Reinforcing and Qi-Benefiting Decoction* on the Loss of Appetite Associated with Depression, Prog. Med. 14(6): 1705-1712, 1994

9) Kudo Y., Mori A., Asai M. et al.: Clinical Evaluation of Kami Kihi in the Treatment of Various Neurotic Disorders, Journal of Clinical Therapeutics & Medicine 8(12): 2989-3007, 1992

10) Ohara K., Fukazawa H., Suzuki Y. et al.: Clinical Effects of *Bupleurum plus Dragon's Bone and Oyster Shell Decoction* and *Pinellia and Magnolia Decoction* in the Treatment of NeurosisJournal of New Remedies & Clinics 34(1): 131-141, 1985

11) Tsutsui S., Igarashi M., Takekoshi I. et al.: Experiences with *Pinellia and Magnolia Decoction* in the Treatment of Depression and Depressive Moods, Journal of New Remedies & Clinics 42(9): 1913-1920 1993

Insomnia is treated among the sleep disorders with psychotherapy, life style guidance and pharmacotherapy in that order; but in reality, hypnotics are applied rather lightheartedly. Kampo medicines do not act like western soporific medications, but are more adjusted in a way to suit the various disease states. From a Kampo medical point of view, sleep disorders are considered to be caused by anomalies of organs like the heart, liver, or gallbladder and prescriptions are administered according to the relevant pathologies. *Wild Jujube Seed Decoction*, *Coptis Detoxificating Decoction*, *Modified Merry Life Powder*, *Pinellia and Magnolia Decoction*, *Back to the Spleen Decoction*, *Warm the Gallbladder Decoction*, *Liver-Inhibiting Powder* and similar preparations are selected. By treating patients who developed a triazolam dependency, with *Wild Jujube Seed Decoction,* Ozaki et al. succeeded in gradually decreasing the frequency of the triazolam use. Reportedly, many patients were finally able to sleep relying only on *Wild Jujube Seed Decoction*[12]. Moreover, when Ozaki et al. used a combination therapy of zopiclone and *Wild Jujube Seed Decoction*, the sleep duration increased in spite of a facilitated elimination of zopiclone from the blood and the QOL on the following day reportedly improved[13].

12) Ozaki T.: Description of Patients who were Able to Completely Withdraw from Hypnotics by Using Tsumura's *Wild Jujube Seed Decoction*, Japan Society of Ryodoraku Medicine 42(7): 4-15, 1997

13) Ozaki T., Ohara S., Saito K.: Combined Effect of Zopiclone and *Wild Jujube Seed Decoction* in the Treatment of Insomnia, Kampo Igaku 22(5): 22-23, 1998

Dementia is a disease difficult to treat. It is frequent among the elderly and currently there are no therapeutic measures available for the treatment of the three forms of cortical dementia. Research into the use of Kampo medicine for this condition has just begun, but some interesting results have already been published. First, DB-RCTs using *Uncaria Powder* have received much attention. Terasawa et al. administered in several facilities either *Uncaria Powder* or a placebo to 139 patients with cerebrovascular dementia and reported for the former a signficantly better improvement than that obtained with the latter[14]. The studies conducted by Shimada et al. could also be interpreted in a similar way (placebo and RCTs)[15]. Based on these studies the improvement in spontaneous conversations, poor facial expressions, decreased calculation abilities, night delirium, sleep disorders, hallucinations and delirium was in the *Uncaria Powder* group significantly better than in the placebo group. There are also multi-facility case series studies using *Coptis Detoxificating Decoction* that show significant improvements[16,17]. *Uncaria Powder* is not effective for cerebrovascular dementia, but is for Alzheimers disease[18]. Regarding this disease, there are a number of excellent studies using *Angelica and Peony Powder*[19]. Hagino et al. focused on the neuroendocrine action of this drug and found in experiments using rats that it causes an increase in the number of nicotinic acetylcholine receptors and the concentration of catecholamines in the cerebral cortex and hippocampus, thereby determining that this has an inhibitive effect on the dementia[20]. Results of research in this area look very promising.

14) Terasawa K., Shimada Y., Kita T. et al: Uncaria Powder in the treatmentnt of vascular dementia a double-blind, placebo controlled study, Phytomedicine 4: 1522, 1997

15) Shimada Y., Terasawa K., Yamamoto T. et al: A well-controlled study of *Uncaria Powder* and placebo in the treatment of vascular dementia, J. Trad. Med. 11: 246-255, 1994

16) Araki G.: Investigation of the Effects of *Coptis Detoxificating Decoction* on Dementia, Journal of Senile Dementia 4: 110-117, 1990

17) Araki G.: Effects of *Coptis Detoxificating Decoction* on Senile Dementia, Therapeutic Research 15: 986-994, 1994

18) Yamamto T.: Kampo Therapy of Alzheimer's Disease, Current Medicine 5: 96-102, 1989

19) Inanaga K., Dainoson K., Ninomiya Y. et al.: Therapeutical of *Angelica and Peony Powder* on Senile Cognitive Disorders, Multi-facility Joint Research, Prog. Med. 16: 293-300, 1996

20) Hagino N., Koyama T.: Stimulation of nicotine acetylcholine receptor synthesis in the brain by *Angelica and Peony Powder*(TJ-23).Recent Advances in the Pharmacology of Kampo (Japanese herbal) Medicines 144-149, Excerpta Medica, Tokyo, 1988

19. Endocrinology

The growing knowledge about various hormones in the body and the organs that secrete them has in recent years clarified many questions. Regarding diseases in this area, hyperthyroidism is marked by visible characteristics and specific clinical symptoms. This condition has been recognized since ancient times, but most other diseases in this field were not clearly defined. This is only natural because there had been no concept of endocrine function. Even though the nature of these diseases has gradually been clarified in recent years, there are almost no studies showing the efficacy of Kampo therapy. The only condition for which there are many reports is hyperthyroidism. Regarding this disease, a modern biomedical therapy has been established and Kampo therapy is used only ancillarily. *Roasted Licorice Decoction*, *Bupleurum Cassia Twig and Dried Ginger Decoction*, *Bupleurum plus Dragon's Bone and Oyster Shell Decoction* and similar preparations are frequently used. Several reports also deal with combinations of thyroid drugs and Kampo medicines[1]. Tachino described three cases in which good control was achieved using thyroid drugs and *Roasted Licorice Decoction*. Moreover, he reported a comparative study treating 35 patients divided in two groups Group A treated with thyroid drugs and *Roasted Licorice Decoction* and group B treated with thyroid drugs and propranolol hydrochloride. The improvements in tachycardia and subjective symptoms were reportedly much better in group A[2].

1) Yukimura Y.: Combination Therapies with Kampo Preparations for Hyperthyroidism - Kampo Medicine (Jap. Journal of Oriental Medicine) 35(2): 47-54, 1984

2) Tatsuno I.: Three Cases of Hyperthyroidism, Modern Kampo Therapy: 280-283 Toyo Gakujutsu Shuppansha, 1985

20. Diabetes Mellitus

Diabetes mellitus has been known since ancient times in both western Europe and China as a disease where sweet urine is passed. Yet, during antiquity or the middle ages, it was not known that this disease was due to an insufficient secretion of insulin and the resulting hyperglycemia. Likewise it was not known that leaving the condition unattended and uncontrolled will eventually result in the manifestation of microvascular lesions. In TCM, symptoms like intensely dry mouth, voracious appetite and the passing of large amounts of urine were classified as being related to the upper, middle or lower portion of the body and thus appropriate therapies were devised. Although this is a useful classification indicating suitable therapies and preparations, the basis of diabetes therapy remains diet and exercise. Diet, caloric intake in particular, in relation to carbohydrates, poses problems for which Yoichiro Ebe has proposed an epoch-making diet (since this is not directly related to Kampo medicine its description will be omitted here). Naturally, Kampo medicine is helpful for the therapy on any level of the disease. *White Tiger Phis Ginseng Decoction*, *Major Bupleurum Decoction*, *Kidney Qi Pill*, *Heart-Clearing Lotus Seed Decoction*, *Poria Powder with Five Herbs* and similar preparations are prescribed depending on the symptoms. Wagazuma et al. performed a randomized controlled study treating 18 patients with type II diabetes with *Heart-Clearing Lotus Seed Decoction* and compared these with the patients in a control group. The researchers observed a significant difference between the two groups, where combined 'improvement' and 'slight improvement' was reportedly 58.38%[1]. Moreover, Wagazuma et al. also described obtaining favorable results with long-term treatment of diabetics with *Poria Powder with Five Herbs*[2].

The focus of interest in Kampo therapy regarding diabetes is its effects on the manifestation of peripheral neuropathies associated with this disease. Some case series studies have described the effects of *Kidney Qi Pill* and *Life-preserving Kidney-Qi Pill*[3,4,5,6]. Also, some reports state that *Life-preserving Kidney-Qi Pill* appears to be effective for the treatment of diabetic corneal disorders[7].

1) Azuma M., Motomiya M., Toyoda T.: Results of Clinical Trials Using *Heart-Clearing Lotus Seed Decoction* for the Treatment of Diabetes, Kampo Medicine (Jap. Journal of Oriental Medicine) 45: 339-344, 1994

2) Azuma M., Sato G., Fukuzawa M.: Long-term Course of Diabetes Therapy Using *Poria Powder with Five Herbs*, Journal of Traditional Medicine 19(S): 56, 2002

3) Mikura R., Suzuki S., Iino S.: Therapeutic Effects of *Kidney Qi Pill* and *Six Ingredient Pill with Rhemannia* on Diabetic Neuropathies, Bell Medico, 7(6): 21-22, 1992

4) Sakamoto N., Sato Y., Goto Y. et al.: Oriental Medical Treatment of Diabetic Neuropathies - Comparative Trial with *Life-preserving Kidney-Qi Pill* and Cobalamine, The Journal of the Japan Diabetes Society 30(8): 729-737, 1987

5) Tawata M., Kurihara A., Nitta K. et al: The effects of Goshajinnkigan, a herbal medicine, on subjective symptoms and vibratory threshold in patients with diabetic neuropathy. Diabet.Res.Clin.Pract 26: 121-128, 1994

6) Taniuchi K., Kashimura H., Fujiwara K. et al.:Clinical Effects of a 1-Year Administration of *Life-preserving Kidney-Qi Pill* for Diabetic Neuropathies, Journal of New Remedies & Clinics 36(4): 636-646, 1987

7) Nagaki Y., Hayasaka S., Hayasaka Y. et al: Effects of *Life-preserving Kidney-Qi Pill* on corneal sensitivity supedcial punctate keratopathy and tear secretion in patients with insulin-dependent diabetes mellitus AM, J. Chin. Med. 31: 103-109, 2003

21. Lipid Abnomalies

Almost none of the metabolic diseases had been recognized in the past as a disease. The concept of lipid anomalies was first established when the technologies to measure lipid concentrations in blood became available and the relevant knowledge regarding metabolism had developed. Accordingly, new Kampo concepts were needed and corresponding therapies sought.

Regarding hyperlipemia, there are no preparations that definitely lower total cholesterol and neutralize fat concentrations, but *Major Bupleurum Decoction* or *Bupleurum plus Dragon's Bone and Oyster Shell Decoction* reportedly did lower these values to a certain extent[1,2,3,4,5]. Research into effects of Kampo preparations influencing the lipid metabolism on arteriosclerosis has begun. Itakura concentrated his experiments on the LDL cholesterol in rabbits and assumed that *Major Bupleurum Decoction* inhibits oxidation of LDL cholesterol, phagocytosis by macrophages and prevented the adhesion of lipid to the vessel wall[6]. Hasegawa treated patients for 4 years with *Bupleurum plus Dragon's Bone and Oyster Shell Decoction* and then examined vascular function by measuring the aortic pulse wave velocity and the carotid arterial system using ultrasonic transduction. Reportedly, antiarteriosclerotic activity was observed in either case[7]. For these studies, extract preparations were used. By proper adjustments of decoctions even slightly better results are expected and currently are the subject of investigation.

1) Murakami T., Oku J., Kimura Y. et al.: Treatment for Hyperlipidemia by Kampo-drugs, J. Trad. Sino-Japanese Med. 11(1): 35-40, 1990
2) Sasaki A., Matsunaga A., Handa K. et al: Effects of *Major Bupleurum Decoction* on Hyperlipemia - Comparison with Clinofibrate, The Japanese Journal of Clinical and Experimental Medicine 68: 3861-3871, 1991
3) Yamano S., Sawai F., Hashimoto T. et al.: Effects of *Major Bupleurum Decoction* on Serum Lipids and Brain Circulation - Comparison with elastase, Kampo & the Newest Therapy 4: 309-313, 1995
4) Miki S., Yashijima A., Wada M. et al.: Effects of *Major Bupleurum Decoction* on Serum Lipids and Examinations of the Coagulation System in Diabetics, Journal of Traditional Medicine 7(2): 120-124, 1990
5) Onuma, T. et al: Effects of *Bupleurum plus Dragon's Bone and Oyster Shell Decoction* (Kampo medicine) on abnormal plasma lipoprotein and glucose metabolism in diabetic Patients, A comparison to Dai-saiko-to, J. Trad. Med. 12: 124-128, 1995
6) Itakura H.: Kampo Medicine and Arteriosclerosis (interview), Kampo Igaku 20(4): 11-13, 1996
7) Hasegawa M.: Anti-arteriosclerotic Actions of *Bupleurum plus Dragon's Bone and Oyster Shell Decoction* (interview), Kampo Igaku 21(5): 11-13, 1997

22. Nutrition

Establishment of sound knowledge pertaining to nutrition is a rather recent event. Comprehension of the necessary amounts of nutrition and an evaluation of the nutritional status in Kampo medicine has been vague in the past making the overall image obscure until the establishment of modern nutrition science.

Among the nutrition disorders, the one being viewed as particularly problematic for modern man is obesity. The basic situation in obesity is a problem with caloric intake (in particular carbohydrates) and caloric consumption. Thus, the condition does not call for an active use of Kampo medicine. However, the use of Kampo medicine can occasionally lead to weight reduction of a few kilograms. One aspect of this weight loss is a Kampo medicine stimulated excretion of surplus body water, for which, for example, *Stephania and Astragalus Decoction* can be used[1]. When this preparation is administered during the treatment of gonarthrosis, it induces an alleviation of articular symptoms and at the same time may often result in a weight reduction of about 2-3 kg. Yoshida et al. administered *Stephania and Astragalus Decoction* to 19 patients with diabetes of the viceral obesity type for whom exercise is difficult because of the underlying disease and reportedly observed a significant decrease in viceral fat as well as a decrease in cholesterol levels[2]. Another suitable preparation is *Divaricate Saposhnikovia Miraculous Powder*. This preparation has traditionally been classified as an exterior-interior releasing formula, but because it contains Rhubarb and Mirabilite, it improves bowel movements and thus facilitates the excretion of surplus materials through the feces. Several studies have dealt with this topic[3]. Akiyama et al. administered *Divaricate Saposhnikovia Miraculous Powder* to obese patients with mutations of the β_3-adrenergic receptor gene, finding a marked reduction in the waist/hip ratio and reportedly also observed an improvement in insulin resistance[4].

1) Sento S., Tanaka N.: Effects of *Stephania and Astragalus Decoction* on Physical Symptoms due to Anomalies in Water Metabolism and Obesity, Therapic Research 20(6): 2021-2028, 1996
2) Yoshida M., Takamatsu J., Yoshida S. et al.: Effects of *Stephania and Astragalus Decoction* in Diabetics with Viceral Type Obesity, Kampo Medicine (Jap. Journal of Oriental Medicine) 49(2): 249-256, 1998
3) Sekine N.: Investigation of the Clinical Usefulness of *Divaricate Saposhnikovia Miraculous Powder* for Hypertension and Obesity, Prog. Med. 24(11): 2803-2806, 2004
4) Akiyama T., Yoshikawa H., Tanaka H. et al.: $\beta_3$adrenergic receptor Effects of *Divaricate Saposhnikovia Miraculous Powder* in Obese Patients with Gene Mutations, Digestion and Absorption 21(2): 159-162, 1998

Several reports indicated that treatment with Kampo medicine is beneficial for the eating disorder anorexia nervosa[5]. The use of *Minor Bupleurum Decoction*, *Liver-Inhibiting and Spleen-Assisting Decoction* has been recommended, but the ratio of successful treatments is not very high. Regarding bulimia nervosa, there are no reports. Disorders of vitamin metabolism are not considered to be an indication for Kampo medicines.

5) Otsuka K.: Five Case Reports About Anorexic Disorders (Psychogenic Lack of Appetite), Jap. J. Orient. Med. 7: 21-22, 1956

23. Infectious Diseases

The development of TCM is closely related to infectious diseases. One important Chinese classic text, the "Shang han lun", is widely known for its descriptions of the treatment of so-called cold induced disease. Even for infectious diseases that appeared later, it provided the basis for the development of therapies based on entirely new concepts for the age. The episodes surrounding Li Dong-Yuen's creation of

the formula *Middle-Reinforcing and Qi-Benefiting Decoction* in the 12th century are famous. Following epidemics of new diseases from the 16th to the 17th century, the concept of "heat induced disease" was established, later providing major contributions to the treatment of infectious diseases, so that it came to be listed as an important item in most textbooks.

Historically, since the “Shang han lun" was taken very seriously in Japan, the prescriptions listed in this classic text have been applied widely for this kind of disease. For infectious diseases of the warm type, prescriptions developed later have been used for the relevant conditions.

Today, progress in public health and hygiene as well as improvements in comprehensive patient management due to the appearance of antibiotics or antibacterial agents, various vaccines, fluid replacements etc. led to a significant reduction in potentially fatal infections. For this reason the application of Kampo medicine to the treatment of infectious diseases in modern Japan is now quite limited. Yet, there are still many diseases treated either solely with Kampo preparations or else in combination with modern medical therapies.

For the common cold and the common cold syndrome, Kampo medicine is used as the treatment of first choice and there are numerous dissertations documenting its use. The symptoms of the common cold are similar to those appearing during upper respiratory infections or diseases of the upper alimentary tract and often develop later into specific diseases. In Japan there is the proverb "The cold is the origin of all diseases". Not only during the initial stages of the common cold, but also with a whole group of similar conditions attempts have been made to cure the emerging symptoms with Kampo medicine. Regarding Kampo medicine, great importance was assigned to the "Shang han lun" since the middle of the 18th century and medical care performed based on its medical concepts. It offers preparations suitable for the treatment from the onset of acute febrile diseases and through their various stages. The methodology outlined in this book enables practical application of Kampo to the treatment of common cold and the treatment carried out along its guidelines. Japanese physicians actually practicing Kampo medicine consider the "Shang han lun" as the therapeutic foundation regarding infectious diseases and the treatment of the common cold meticulously implements the contents of this book. Many physicians specialized in Kampo medicine consider the treatment of the common cold to be the basics of Kampo therapy and a large number of dissertations deal with this topic[1,2].

The most frequently used formula is Pueraria Decoction. Because this formula suits the Japanese physique very well, it is generally used during the early phase of the common cold and apart from that may also be useful as a preventive medication during epidemics[3,4,5]. Basic studies show that it inhibits the release of PGE2 etc. and have clarified a number of other actions as well[6,7]. Generally, many prescriptions can be used for the wind and cold induced common cold. During the early phase, other formulas beside *Pueraria Decoction*, like *Ephedra Decoction*, *Cassia Twig Decoction*, *Cassia Twig and Ephedra half and half Mixture Decoction*, *Bupleurum and Cassia Twig Decoction, Ephdra, Aconite and Manchurian Wildginger Decoction, Cyperus and Perilla Leaf Powder, Ginseng and Perilla Decoction* are used. Following the passage of a few days, *Minor Bupleurum Decoction* and its modifications or *Bamboo Shavings Gallbladder-Warming Decoction* are used. In case of a protracted course, *Middle-Reinforcing and Qi-Benefiting Decoction* and other tonifying formulas come into use. Kampo preparations permit general treatment even when patients are allergic to western medicines[8].

In Japan there are a few prescriptions for wind-heat conditions. This is due to the fact that the concept of heat induced disease was not adequately introduced in Japan from China. Until the middle of the 19th century there were relatively few epidemics of heat induced disease. While the representative extracts *Honey Suckle and Forsythia Powder* or *Mulberry and Chrisanthemum Flower Decoction* are not available, this concept has now found wide acceptance and both preparations are used as decoctions. OTC prescriptions are employed, or else these preparations are substituted with *Head-Clearing Divaricate Saposhnikovia Decoction* or *Schizonepeta and Forsythia Decoction*.

Cumulative research indicates that in RCT using both *Ephdra, Aconite and Manchurian Wildginger Decoction* and generic cold medicines *Ephdra, Aconite and Manchurian Wildginger Decoction* apparently led to a significantly better improvement in the symptom complex during the early phase of the disease[9]. Again, DB-RCT studies showed that after more than 5 days following onset, patients with common cold (corresponding to the lesser yang disease state) treated with *Minor Bupleurum Decoction* fared significantly better than the placebo group[10]. The efficacies of *Dwarf Lilyturf Decoction* and dextromethorphan hydrobromide were examined in a comparative study[11] for the treatment of cough as the sole remaining symptom, after the other cold symptoms had subsided.

1) Ito T.: Treatment of the common cold syndrome in Kampo medicine, Clinical All-round 49(10): 2697-2698, 2000
2) Homma Y.: Usefulness of Kampo medicine for the treatment of patients with febrile syndromes, Kampo Medicine (Jap. Journal of Oriental Medicine). 46(2): 285-291, 1995
3) Yanagi K. et al: Usefulness of a single dose of *Pueraria Decoction* during the early phase of common cold, in: Summaries of the lectures held at the 52nd General Conference of The Japan Society for Oriental Medicine, P243, 2001
4) Kaji M., Kashiwagi S., Hayashi J. et al: Clinical effects of *Pueraria Decoction* for the common cold, Jpn. J. Clin. Exp. Med. 70: 3266-3272, 1993
5) Nishimoto T., Higasa K., Matsumoto K.: Clinical effects of *Pueraria Decoction* drinks for the common cold (Medical Care and New Drugs) 28: 1433-1440, 1991
6) Nakahata N., Ishimoto H., Ohizumi Y. et al: Effects of *Pueraria Decoction*, Minor Bupleurum Decoction and Ephedra Decoction on prostaglandin production and hydrolysis of inositol phospholipids in cultured rabbit astrocytes, Kampo Igaku 17: 200-217, 1993
7) Kurokawa M., Imakita M., Kumeda C. A. et al.: *Pueraria Decoction* suppressed interleukin-1α production responsive to interferon and alleviated infkuenza infection in mice, J. Trad. Med. 13(3): 201-209, 1996
8) Yamaguchi H.: Common cold in patients with drug induced hepatitis; Lecture seminar on Kampo medicine for medical students, 1997
9) Homma Y., Takaoka K., Yozawa H.: Comparative study using the envelop method to determine the usefulness of *Ephdra, Aconite and Manchurian Wildginger Decoction* for the common cold syndrome, Kampo Medicine (Jap. Journal of Oriental Medicine) 47(2): 245-252, 1996
10) Kaji M., Kashiwagi S., Yamakido M.: Double-blinded comparative study using *Minor Bupleurum Decoction* and a placebo for the treatment of the common cold, Jap. J. Clin. Exp. Med., 78(12): 2252-2268, 2001
11) Fujimori K., Suzuki E., Shimojo F.: Comparison of the efficacy of *Dwarf Lilyturf Decoction*; Ophiopogon Decoction to and dextromethorphan hydrobromide for residual cough following improvement of the common cold syndrome (pilot study), Kampo Medicine (Jap. Journal of Oriental Medicine), 51(4): 725-732, 2001

In daily clinical practice, antiviral agents like Tamiflu, Relenza or Symmetrel, are used for the treatment of influenza. Kampo preparations when employed skillfully, are also quite effective[12,13,14]. Many of the formulas given in the "Shang han lun" are used for the treatment of this kind of disease in Japan. This particular classic lists an abundance of prescriptions designed for the treatment of pathologic conditions caused by the invasion of wind cold evil. Among extracts, *Ephedra Decoction* is frequently used, but a combination of *Cassia Twig Decoction* and *Ephedra, Apricot, Licorice and Gypsum Decoction* to prepare *Major Blue Dragon Decoction,* also finds application[15]. During influenza epidemics *Pueraria Decoction* has been used for prevention and reportedly was found to be effective[16].

12) Iwasaki K.: Special: New strategies for the treatment of cold and influenza; Cold and cold remedies as viewed in Kampo medicine, Current Therapy 20(10): 1049-1053, 2002
13) Koizumi K.: Special: Management of the common cold syndrome and influenza for the primary care physician; An approach to the common cold with Kampo medicine, Journal of Therapy 85(12): 3205-3210, 2003
14) Kimoto H., Kuroki H.: Significance of Kampo medicine during influenza epidemics, Journal of Traditional Medicine 20(S): 146, 2003
15) Mitani K.: Case studies of patients with high fever treated the extract preparation *Major Blue Dragon Decoction*, *phil* KAMPO 4: 15-16
16) Yakazu D.: Prevention of influenza, Sokai December issue 1975: 93-94

Most of the other infectious diseases require western medical treatment. Yet, some infectious diseases, difficult to treat with western medicine, are still treated with Kampo preparations. For example, *Middle-Reinforcing and Qi-Benefiting Decoction*, *Ten Strong Tonic Herbs Decoction* or *Ginseng Nutrition Decoction* are used for the treatment of chronic MRSA infections[17,18].

17) Kitahara M., Ishikawa S., Hara K.: Protective effect of *Ten Strong Tonic Herbs Decoction* against infection after acute ischemic stroke in elderly patients, Biotherapy 17(3): 287-298, 2003
18) Kitahara M.: The Effect of Supplementing Formulas for the Treatment of MRSA infections in Neurosurgery, Evolving Kampo 2005, 1(1): 14-15

Regarding HIV infections, research has just started, but future results are anticipated with great expectations. Please refer to the section on pediatric diseases regarding measles, epidemic parotiditis, roseola infantum, rota virus infections, Kawasaki syndrome and similar pediatric diseases.

24. Cancer

In this field there are no Kampo prescriptions that are definitely effective. However, Kampo medicine is used as adjunctive therapy following surgery for various malignant tumors, or else in combination with chemotherapy or radiation therapy and here plays a significant role[1]. Frequently used preparations include *Middle-Reinforcing and Qi-Benefiting Decoction*, *Ten Strong Tonic Herbs Decoction*, *Ginseng Nutrition Decoction* etc. and there is an extensive body of research pertaining to these drugs[2,3,4,5,6]. The purpose of the Kampo therapy is to provide relief for the suffering of the patients, prevent or alleviate the side effects of western medical therapies, improve immune function, prolong survival and improve the QOL. Each of the above mentioned preparations improve immune function and influences NK cell activity. In this field there is an abundance of basic research and the drugs are topics in the relevant academic societies[7,8,9]. Many basic studies have been performed on those topics and their results support the clinics. Saiboku has investigated the inhibitive actions of the aforementioned three preparations on the development of metastases and it is now becoming clear that there are differences in their respective mode of action. He states that the manifestation of the effects of Kampo preparations may possibly be related to physical disposition or else organ selectivity[10].

In actual therapy, a number of cases that can be treated with extracts are rather limited, so that the use of decoctions is required. Here the experiences gathered in China prove to be useful and a significant number of physicians put them to practical use. Those physicians determine the Kampo medical pattern (SHO) according to the location of the malignant tumor and its type and then prepare and administer suitable formulas (which contain crude drugs with antitumor activity)[11]. Shimizu selects the crude drugs

corresponding to the malignant tumors of the individual's bowels and viscera and has proposed preparations to be administered following surgery, radio- or chemotherapy respectively[12].

1) Okamoto T., Sairenji M.: Significance of Kampo in the Treatment of Cancer, Kampo and Most Advanced Therapies 4(2): 123-128, 1995
2) Kuroda T., Imai J., Tamakuma S.: Prevention of Anticancer Drug Side Effects by *Ten Strong Tonic Herbs Decoction* and Clinical Immunologic Investigations Biotherapy 3(4): 789-795, 1989
3) Fujiwara M., Kohmoto Y.: Usefulness of *Ten Strong Tonic Herbs Decoction* in the Treatment of Myelostasis due to Chemotherapy for Gynecologic Cancers, Journal of the Gynecology and Obstetrics in Chugoku and Shikoku Region 47(2): 153-157, 1999
4) Abe K.: Effects on Side Effects due to Chemotherapy Following Cancer Surgery, Prog. Med. 9: 2916-2922, 1989
5) Hasegawa K., Fukunishi H., Kiyoshige T. et al.: Journal of Traditional Medicine 11, 181-187 1994: Clinical Effects of a Combination Therapy with Kampo preparations (*Ginseng Nutrition Decoction*, *Ten Strong Tonic Herbs Decoction*) to Alleviate the Side Effects of Carcinostatic Agents
6) Sugimachi K.: Research into the Usefulness of *Ginseng Nutrition Decoction* as an Adjuvant Chemotherapy After Surgery for Gastric Cancer, Clinics and Research 72(2): 182-186, 1998
7) Kawakita T., Nomoto K.: Immunopharmacologic Actions of *Ginseng Nutrition Decoction* and its Clinical Application, Prog. Med. 19: 2113-2121, 1999
8) Kawakita T., Nomoto K.: Immunopharmacologic Actions of *Middle-Reinforcing and Qi-Benefiting Decoction* and its Clinical Application, Prog. Med. 18: 801-807, 1998
9) Nakawa H., Sai B., Tsuno N. et al.: Effects of *Ten Strong Tonic Herbs Decoction* and *Middle-Reinforcing and Qi-Benefiting Decoction* on Cells with Induced Cancer Genes, Kampo and Most Advanced Therapies 4(2): 129-132, 1995
10) Saiki I.: Cancer Metastases and Kampo Preparations, Science 75(7): 842-845, 2005
11) Kotaka S.: Regarding Therapies for Malignant Tumors - Discussion, TCM Clinics 17(2): 2-5, 1996
12) Shimizu H.: New Medical Revolution, Shuei Publications: 139-145, 2004

25. Pediatrics

The field of pediatrics, even when viewed historically, has been from a comparatively early period divided into subspecialities leading to the emergence of specialists, so that there is an abundant body of experience with various diseases. In particular, the ancient experiences with infectious diseases are currently very helpful. Yet, the progress of modern medicine in recent years resulted in a comparative narrowing of the range of indications for Kampo therapy. Simultaneously, new indications have arisen or have been developed, opening a new field.

Regarding acute infections, applications have been attempted, in particular for the early phase of the so-called viral common disease. For the treatment of epidemic parotitis (mumps) the use of *Minor Bupleurum Decoction*[1], for measles *Cimicifuga and Pueraria Decoction*[1] and *White Tiger plus Ginseng Decoction*[2], for roseola infantum *White Tiger plus Ginseng Decoction*[3] has been reported.

Due to the low age of onset, the treatment of influenza with antiviral preparations is limited and therefore often calls for the administration of Kampo medicine. *Ephedra Decoction*, *Pueraria Decoction* and similar preparations are widely used. Abe conducted a comparative trial observing 783 patients divided into a group treated with Kampo medicine and a control group treated with western medications. According to this study, progression to severe stages occurred in the Kampo treatment group only infrequently[4].

1) Abe K.: Clinical Effects of *Minor Bupleurum Decoction* for the Treatment of Mumps and *Cimicifuga and Pueraria Decoction* for the Treatment of Measles, Journal of the Japan Pediatric Oriental Medicine Society 13(1): 14-20, 1997
2) Mizutani K.: Experiences with the Use of *White Tiger plus Ginseng Decoction* (TJ-34) for the Treatment of Pediatric Febrile Diseases - In particular regarding measles, Pediatric Clinic 43(6): 1361-1364, 1990
3) Abe K. Tanaka K.: Effects of *White Tiger plus Ginseng Decoction* on Roseola Infantum, Kampo Medicine (Jap. Journal of Oriental Medicine) 47(6): 118, 1997
4) Abe K.: Comparison of Therapeutic Results of Treating Type A Hongkong Influenza with Kampo Medicine, Western Medicine or Amantadine Hydrochloride, 63rd Yamakage Pediatric Conference, 1999

The common cold is a good indication for Kampo medicine. During the early stages, *Pueraria Decoction*, *Ephedra Decoction*, *Bupleurum and Cassia Twig Decoction*, *Ephdra, Aconite and Manchurian Wildginger Decoction* and similar preparations are used. There are a number of case series studies, but their description will be omitted here. Clinically problematic is interference with ordinary daily life in children due to recurrent upper respiratory tract infections. These children are highly susceptible to the common cold, and once they are affected, the disease tends to run a protracted course. They may only be able to consume small amounts of food, suffer from recurrent diarrhea and become exhausted with light physical exercise. This type of child in Japan is said to have a "weak constitution". Long-term application of *Minor Bupleurum Decoction* or *Bupleurum and Cassia Twig Decoction* to these children has often been observed to reduce their susceptibility to infections and builds physical strength[5]. Akiba et al. administered *Bupleurum and Cassia Twig Decoction* for a long period to 14 children suffering from recurrent infections (catching cold easily) and reported an efficacy of 78%[6]. There are also other case series studies dealing with the use of *Bupleurum and Cassia Twig Decoction* in similar cases, where Koga et al. found an efficacy of 88% (total number of patients 16)[7], Mine found 90% (total number of patients 10)[8]. Some case series studies also investigated *Minor Bupleurum Decoction*[9]. Iwama et al. treated 12 children with recurrent tonsillitis with *Bupleurum Liver-Clearing Decoction* and reported an efficacy of 80%[10].

5) Hirose S.: Children With Weak Constitution, 3(3): 253-257, 1994
6) Akiba T., Araki Y., Nakajima A. et al.: Improvements Caused by Long-term Application of *Bupleurum and Cassia Twig Decoction* in Children Susceptible to Common Cold, Kampo Medicine (Jap. Journal of Oriental Medicine) 41: 149-155, 1991
7) Kouga M.: Easy Susceptibility to Infection (recurrent airway infections) and Saiko Preparations, Journal of the Research of Japan Kampo Medicine for Pediatrics 13(1): 71-75, 1997

8) Mine M.: Practical Experiences with *Bupleurum and Cassia Twig Decoction* in the Treatment of Nursery School Children Suffering from Frequent Recurrent Infections, General Meeting at the Third Conference of The Society of Ambulatory and General Pediatrics of Japan, 1993
9) Iwama M., Iriyama E.: Effects of *Minor Bupleurum Decoction* on Recurrent Febrile Airway Infections, Kampo Igaku 25: 115-117, 2001
10) Iwama M.: *Bupleurum Liver-Clearing Decoction* for the Treatment of Recurrent Tonsillitis, Journal of the Japan Society of Pediatrics, 1995

Regarding infections of the gastrointestinal tract, vomiting associated with the early phase of acute viral gastroenteritis and treatment with *Poria Powder with Five Herbs* has received much attention. In particular, for the treatment of vomiting associated with rota virus induced gastroenteritis, this medication applied as suppository or enema has frequently been reported as being extremely effective[11,12,13,14]. This formula has traditionally been applied orally like other Kampo formulas, but in cases of vomiting, the administration may prove difficult. If a rapid onset of the effect is required, pediatricians sometimes prepare and administer suppositories or enemas themselves. Regarding this use, section 74 of the "Shang han lun" lists the "water reversal pattern" and describes the practical application of *Poria Powder with Five Herbs* for its treatment. Moreover, in developing countries, where modern medical equipment like intravenous drip infusions are not available, this preparation could play an important role in lowering mortality.

11) Hashimoto H.: The Effects of *Poria Powder with Five Herbs* on Vomiting Associated with Common Cold Induced Gastroenteritis - Ideas of facilitating oral application, Kampo Igaku 25: 178-180, 2001
12) Fukutomi O., Matsuo N., Teramoto T. et al.: Examination of *Poria Powder with Five Herbs* Enemas for the Treatment of Vomiting Associated with Acute Pediatric Gastroenteritis, Japanese Journal of Pediatric 53: 967-970, 2000
13) Hashimot H.: Comparative Study of *Poria Powder with Five Herbs* and *Minor Bupleurum Decoction, Poria Powder with Five Herbs* Enemas for the Treatment of Vomiting Associated with Pediatric Viral Gastroenteritis, Kampo Igaku 25: 73-75, 2001
14) Yoshida M.: Effects of *Poria Powder with Five Herbs* Suppositories for the Treatment of Vomiting in Infants and Children, Oriental Medicine 28(3): 36-38, 2000

Acute bronchitis, asthmatic bronchitis etc. are among those respiratory diseases for which Kampo medicines are frequently used. *Ephedra, Apricot, Licorice and Gypsum Decoction*, *Minor Blue Dragon Decoction*, *Minor Bupleurum Decoction*, *Combind Minor Bupleurum Decoction and Pinellia and Magnolia Decoction*, *Dwarf Lilyturf Decoction* and similar preparations are frequently used, but since these are very ordinary diseases, no case series studies are available. Mycoplasmal pneumonia does not particularly require treatment with Kampo medicine, but during the acute phase, a combination of the antibacterial medication with *Minor Bupleurum Decoction and Lophatherus and Gypsum Decoction* was able to shorten the required treatment period with the antibacterial agents and also decreased the duration of the morbidity in the treatment group[15]. Moreover, some studies showed that in a group treated with *Ephedra, Apricot, Licorice and Gypsum Decoction* during the chronic phase, it shortened the duration of coughing and led to an earlier normalization of the CRP values[16].

15) Miyazaki Z., Mori K.: Acute Mycoplasmal Pneumonitis, *Minor Bupleurum Decoction and Lophatherus and Gypsum Decoction*, 2001
16) Miyazaki Z., Mori K.: Convalescence Period of Mycoplasmal Pneumonitis, *Ephedra, Apricot, Licorice and Gypsum Decoction*, 1994

Among the diseases of the cardiovascular system, Kampo therapy is often applied to orthostatic hypotension. Mori et al. treated 74 patients meeting the diagnostic criteria for orthostatic dysregulation with *Bupleurum and Cassia Twig Decoction* and observed improvement for all symptoms. The severity of all symptoms after 4 weeks of treatment was significantly lower than that before treatment. Regarding the chief complaint, a more than mild improvement was reported for 64.7% of the cases[17]. There are also reports about the use of *Pinellia, Largehead Atractylodes and Tall Gastordia Decoction*, *Middle-Reinforcing and Qi-Benefiting Decoction*, *Minor Middle-Strengthening Decoction* and similar preparations[18,19], either of which showed favorable results. Arrhythmia too is an indication. Otsuka et al. treated 31 children with extrasystoles with *Roasted Licorice Decoction* extract and found an improvement in supraventricular extrasystoles of approximately 70%, for ventricular extrasystoles a rate of 62%, and reported the resolution of the comparatively dangerous ventricular tachycardia in 4 out of 5 patients[20].

17) Mori M., Yamada K., Saka M. et al.: Clinical Application of *Bupleurum and Cassia Twig Decoction* for Orthostatic Dysregulation, Japanese Journal of Pediatrics 45: 1964-1974, 1992
18) Tsuru N.: Clinical Experiences with of *Pinellia, Largehead Atractylodes and Tall Gastordia Decoction* and *Minor Middle-Strengthening Decoction* in the Treatment of Orthostatic Dysregulation, Japanese Journal of Pediatric 48: 585-591, 1995
19) Tomita H., Chiba S., Kadowaki J. et al.: Clinical Effects of *Middle-Reinforcing and Qi-Benefiting Decoction* for Orthostatic Dysregulation in Children, The Journal of Pediatric Practice 60: 162-167, 1997
20) Otsuka Y.: Extrasystoles (Arrhythmias), The Journal of Pediatric Practice 67: 1481-1481, 1988

Kampo medicine is also used for the treatment of constipation in children. Muramatsu et al. treated 72 constipated children without any organic disease with *Major Middle-Strengthening Decoction* extract and reported improvement in 69.4% of the cases after one week and 79.2% after two weeks[21]. Aoki et al. treated refractory constipation in severely handicapped children with *Hemp Seed Pill* and *Rhubarb and Licorice Decoction* and observed a significantly increased frequency of spontaneous bowel movements and also a significantly decreased frequency of enema administrations and thus stated that both preparations are useful[22].

The range of application of Kampo therapy in pediatrics has recently widened. *Major Middle-Strengthening Decoction* is used to treat early transport disorders or the development of adhesive ileus following gastrointestinal surgery and in many reports, has been described as very useful[23,24]. When western medical treatment of pediatric hemorrhoids or perianal abscesses proves difficult, the application of *Middle-Reinforcing and Qi-Benefiting Decoction* reportedly led to good results. Muramatsu et al. treated 65 patients (all children were male and age ranged from 22 days to 5 years) with perianal abscesses or hemorrhoids with *Ten Strong Tonic Herbs Decoction*, observing the course in comparison to a 28-patient control group in which only incisions and pus drainage were performed. In the treatment group (3 patients dropped out, because they were unable to use the medication) 13 required an incision and 1 patient required surgery, but the remaining 48 patients (77.4%) reportedly healed. There is a report describing that short-term therapeutic results were best in the *Ten Strong Tonic Herbs Decoction* treatment group[25].

21) Muramatsu T., Kawamura K., Kuriyama Y. et al.: Usefulness of Treatment with *Middle-Reinforcing and Qi-Benefiting Decoction* for Chronic Pediatric Constipation - Evaluation with a constipation score, Japanese Journal of Pediatric Surgery 32: 285-290, 2000

22) Aoki H., Nishikura T., Ono S. et al.: Kampo Therapy for Constipation in Severely Handicapped Children - Comparison of *Hemp Seed Pill* and *Rhubarb and Licorice Decoction*, Kampo Igaku 21(28): 21-24, 1997

23) Fukushige T., Takamatsu H., Noguchi H. et al.: Clinical Experiences with *Major Middle-Strengthening Decoction* for Insufficient Postsurgical Peristalsis, Ileus, Prog. Med. 17(9): 2554-2558, 1997

24) Kawase K., Satomi A., Yoshida H. et al.: Clinical Experiences in Our Department with *Major Middle-Strengthening Decoction*, Prog.Med. 17(9): 2550-2553, 1997

25) Muramatsu T., Fuseya S.: Clinical Experiences with *Ten Strong Tonic Herbs Decoction* for the Treatment of Perianal Abscesses in Infants, Japanese Journal of Pediatric Surgery 32: 1322-1325, 2000

In most cases, idiopathic thrombocytopenic purpura (ITP) develops as an acute form and is resolved spontaneously after a few months, but for patients with chronic forms not responsive to treatment, Kampo therapy is also performed. Takeda et al. administered *Modified Back to the Spleen Decoction* to 7 children with ITP resistance to western medical treatment and achieved an efficacy of 33%[26]. Occasionally there are also individual case reports about this disease.

26) Takeda T., Nagatate N., Hatae Y. et al.: Clinical Experiences with Tsumura *Modified Back to the Spleen Decoction* for the Treatment of Chronic Thrombocytopenic Purpura, Iryo 46(12): 1016-1019, 1992

Kampo therapy is used for patients with Henoch-Schönlein purpura resistant to western medical treatment. Single case reports have been published[27].

27) Tsuji Y., Abe Y., Hisano M. et al.: Cases of Allergic Purpura Effectively Treated with Kampo, Kampo Igaku 27: 169-172, 2003

The application of Kampo therapy during the early stages of Kawasaki disease is reportedly associated with a favorable prognosis. Hirota et al. divided 19 patients in the acute phase of Kawasaki disease into two groups and treated both groups with the required western medical therapy. Group 1 (including 11 patients) received *Coptis Detoxificating Decoction* and was then compared with a placebo group (8 patients). The results revealed that a combination therapy of vitamin E and *Coptis Detoxificating Decoction* for Kawasaki disease improves the anti-inflammatory effects and lipid metabolism, also improving the prognosis for the vascular changes and has therefore been described as an excellent therapy[28].

28) Hirota A., Senaga R., Kawashima S.: Examination of the Effects of *Coptis Detoxificating Decoction* on Kawasaki Disease Using a Double-Blind Study, Japanese Journal of Pediatrics 38: 2329-2335, 1985

The therapy for pediatric bronchial asthma in recent years has made enormous progress, so that the opportunities for using Kampo medicine are now less frequent than before. Yet, a wealth of experiences with the application of Kampo therapy for this disease has accumulated and is now used widely. Numerous preparations are used, but the most widely used preparation is *Combind Minor Bupleurum Decoction and Pinellia and Magnolia Decoction* and several case series studies have investigated its application. Ito et al. conducted a randomized controlled trial (RCT) examining 43 pediatric patients with bronchial asthma divided into a *Combind Minor Bupleurum Decoction and Pinellia and Magnolia Decoction* treatment group including 23 patients and a tranilast treatment group of 21 patients. Twelve weeks after the treatment, general improvement and better than mild improvement was observed in 95% of the patients in the *Combind Minor Bupleurum Decoction and Pinellia and Magnolia Decoction* group, whereas the same ratio was reportedly 73.7% in the tranilast group[29]. Watanabe et al. treated 22 patients with atopic asthma over a period of three months with *Combind Minor Bupleurum Decoction and Pinellia and Magnolia Decoction* extract and found improvements in 16 of the patients (72.8%) and better than mild improvements in 22 patients (100%)[30]. *Minor Blue Dragon Decoction* is also frequently used. Inoue et al. treated 9 patients about to develop an attack that started with runny nose, sneezing and then developed into cough and phlegm with *Minor Blue Dragon Decoction* extracts. This reduced the number of attacks significantly. In six of these patients, improvements were observed[31]. When the treatment with extract preparations remains ineffective, the application of decoctions is worth a try and has been reported to produce good results[32].

29) Ito S., Mikawa H.: Effects of *Combind Minor Bupleurum Decoction and Pinellia and Magnolia Decoction* in the Treatment of Pediatric Bronchial Asthma - Multi-facility joint research And Comparative Trial with Tranilast, The Clinical Report 26: 3993-3998, 1992

30) Watanabe H.: Long-term Administration of *Combind Minor Bupleurum Decoction and Pinellia and Magnolia Decoction* for Exercise Induced Asthma and Airway Hypersensitivity in Bronchial Asthma, Kampo Medicine (Jap. Journal of Oriental Medicine) 41: 233-239, 1991

31) Inoue K.: Clinical Effects and Limitations of Kampo Therapy for Bronchial Asthma, Pediatrics of Japan 31: 531-540, 1990

32) Yamaguchi H.: Experience with the Use of Decoctions for the Treatment of Pediatric Bronchial Asthma Where Western Medical Treatment Has Become Difficult, Φ υ τ ο 1(4): 14-17, 2001

Regarding atopic dermatitis, *Bupleurum Liver-Clearing Decoction*, *Wind Dispersing Powder*, *Coptis Detoxificating Decoction*, *Middle-Reinforcing and Qi-Benefiting Decoction*, *Warming and Clearing Decoction*, *For Eczema Decoction*, *White Tiger plus Ginseng Decoction*, and similar preparations are prescribed and there are many related studies. Temporarily, high hopes have been placed on Kampo therapy for this disease in Japan due to an aversion to steroids. Yet, except for a very small number of cases, it has been shown that with proper skin care the treatment of this condition is not that difficult Today Kampo medicines are not used as frequently as in the past and independent treatment with Kampo medicine is not performed. Still, Kampo therapy does have a certain beneficial effect on this disease. Among the case series studies, particular attention has been paid to the effects of *Middle-Reinforcing and Qi-Benefiting Decoction* for the treatment of infants (which differs from that in adults). Tsuji et al. administered *Middle-Reinforcing and Qi-Benefiting Decoction* to 187 patients aged between 3 and 6 years with atopic dermatitis. Observing these patients for a period of 24 weeks, workers found improvements for all the items: pruritus, erubescence, papules, vesicles, erosion, hyperplasia, lichenification and scratch marks. In the 24th week, the number of patients that could be evaluated was 71. Marked improvement was found in 23.9%, intermediate improvement in 62.0% and better than mild improvement in 85.9%. Further, the use of topical steroids could significantly be decreased[33]. When Ito et al. treated 25 children with atopic dermatitis in whom topic medications had not been sufficiently effective over a period of 12 weeks, they observed significant differences in the improvement following the second week and thus reportedly achieved a better than mild improvement in general condition in about 80% of the patients[34].

33) Tsuji Y., Tsujimoto Y., Iikura Y. et al.: Investigation of the Clinical Usefulness of *Middle-Reinforcing and Qi-Benefiting Decoction* for the Treatment of Pediatric Atopic Dermatitis, The Japanese Journal of Clinical and Experimental Medicine 70: 290-299, 1993

34) Ito S.: Clinical Experiences with the Use of *Bupleurum Liver-Clearing Decoction* Granules for the Treatment of Atopic Dermatitis, The Journal of Traditional Sino-Japanese Medicine, Vol. 10 No.1, Supple. Kampo Therapy for Intractable Diseases or Conditions, second volume: 202-203, 1989

Regarding renal and urinary diseases, several studies have dealt with the use of Kampo medications for chronic glomerular nephritis, nephrotic syndrome and IgA nephropathy. *Minor Bupleurum Decoction, Poria Powder with Five Herbs* extract was administered over a period of 1 year to 101 patients with chronic glomerular nephritis (including 32 patients with IgA nephropathy) and 129 patients with nephrotic syndrome in a multi-facility case series study. Improvements were achieved in 63.8% of the patients with chronic glomerular nephritis and 61.5% of the patients with nephrotic syndrome. Regarding the tissue forms, this patient population included 46 patients with proliferative changes of whom 62.5% showed better than mild improvements with 36.4% of the 11 patients with focal sclerosis showing mild improvement In 28 patients with IgA nephropathy, Better than mild improvements were observed in 67.9% of the cases, and in 94 patients with nephrotic syndrome presenting minimal changes, better than minor improvements were reportedly observed in 61.7% of the cases[35]. Yazaki et al. treated 80 pediatric patients with nephrotic syndrome over an average period of one year with *Minor Bupleurum Decoction, Poria Powder with Five Herbs* and thus could reportedly observed some degree of prevention of recurrences and a dose reduction in steroids[36]. Ito et al. used *Minor Bupleurum Decoction, Poria Powder with Five Herbs* extract for 221 patients with nephrotic syndrome in combination with steroid medications and observed a reduction in the frequency of recurrences[37]. Yoshikawa et al. used *Minor Bupleurum Decoction, Poria Powder with Five Herbs* for 101 patients with IgA nephropathy showing mesangial proliferation in a RCT and found after 2 years normalization of the urinary findings in 46% of these patients, which was a significantly higher ratio than in the control group[38]. Based on these facts, Ito et al. concluded that *Minor Bupleurum Decoction, Poria Powder with Five Herbs* alone in the treatment of IgA nephropathies during childhood, characterized histologically by minimal changes or else focal mesangial proliferation, is capable of significantly inhibiting proteinuria and hematuria[39]. Although few in number, some reports also describe purpuric nephritis[40].

Since aggravation of IgA nephropathy may be triggered by infections, it has become clear that tonsillectomy in conjunction with steroids leads to an improvement in the hematuria. In other words, if no infections occur, there will also be no aggravation in the renal lesions. As stated above, since treatment with Kampo medicine decreases the susceptibility to infection, formulas like *Bupleurum and Cassia Twig Decoction* or *Minor Bupleurum Decoction* (these formulas are included in the preparation *Minor Bupleurum Decoction, Poria Powder with Five Herbs*) etc. are used in order to decrease the chances for infection in attempts at improving the prognosis of this disease.

35) Yoshikawa N., Ito T., Takekoshi Y. et al.: Combination Therapy with *Minor Bupleurum Decoction, Poria Powder with Five Herbs* for Patients with Steroid-reactive Pediatric Nephrotic Syndrome During the Early Treatment Phase with Steroids and Recurrences - Prospective controlled study - Journal of The Japanese Society of Nephrology 40: 587-590, 1998
36) Yasaki T., Hirose S.: Clinical Effects of *Minor Bupleurum Decoction, Poria Powder with Five Herbs* for Pediatric Nephrotic Syndrome, Journal of Traditional Medicine 4: 203-206, 1987
37) Ito K., Okada T., Kitagawa T. et al.: Ethical Kampo Medicines for Pediatric Chronic Glomerular Nephritis and Pediatric Nephrotic Syndrome: Clinical Effects of *Minor Bupleurum Decoction, Poria Powder with Five Herbs* - Multi-facility open trial - Kidney and Dialysis 36: 1237-1246, 1994
38) Yoshikawa N., Ito T., Sakai T. et al.: Prospective Controlled Trial Using *Minor Bupleurum Decoction, Poria Powder with Five Herbs* for the Treatment of Pediatric IgA Nephropathy Showing Focal and Minimal Mesangial Proliferative Lesions, The Japanese Journal of Nephrogy 39: 503-556, 1997
39) Ito K., Miyagawa S.: Chronic Nephritis, IgA Nephropathy, Purpuric Nephritis, The Journal of Pediatric Practice 67: 1462-1466, 2004
40) Tsuru N., Tokieda K., Niimi K.: Clinical Effects of Tsumura *Minor Bupleurum Decoction, Poria Powder with Five Herbs* in the Treatment of Pediatric IgA Nephropathy and Purpuric Nephritis, The Japanese Journal of Clinical and Experimental Medicine 67(9): 236-242, 1990

Among the neurological diseases Kampo medicine is frequently applied for epilepsy. Several reports describe the use of *Bupleurum and Cassia Twig Decoction*, *Minor Bupleurum Decoction and Cassia Twig Decoction plus Peony*, *Bupleurum plus Dragon's Bone and Oyster Shell Decoction*, *Minor Middle-Strengthening Decoction* and similar preparations for the treatment of refractory epilepsy difficult to control by western medical treatment. Okabe administered Kampo medicine to 26 patients with refractory epilepsy and reportedly observed marked effectiveness in one patient (disappearance of attacks) and an effectiveness in 12 patients[41]. Sugimoto et al. administered in addition to the ongoing treatment, anticonvulsants Tsumura *Minor Bupleurum Decoction* extract granules and Tsumura *Minor Middle-Strengthening Decoction* extract granules to 30 patients (24 patients with mental retardation, 8 patients with cerebral paralysis) with refractory epilepsy, particularly patients presenting complex partial seizures. They observed 2.5 years after initiation of the combination therapy, a marked effectiveness in 5 patients, effectiveness in 6, temporary effectiveness in 5, no effects in 10 and aggravation in one patient, resulting in an overall efficacy of 40%[42]. Seki too administered *Minor Bupleurum Decoction and Cassia Twig Decoction plus Peony* to 24 patients with refractory epilepsy and reportedly observed marked effectiveness in 4 patients and effectiveness in 3, resulting in an overall efficacy of 29%[43].

41) Okabe T.: Kampo Therapy of Neurologic Diseases in Children, The Journal of Traditional Sino-Japanese Medicine 12: 29-37, 1991
42) Sugimoto T., Yasuhara A., Nishida N. et al.: Kampo Combination Therapy for Refractory Epilepsy - Treatment with *Minor Bupleurum Decoction* and *Minor Middle-Strengthening Decoction*, Japanese Journal of Pediatrics 45(12): 2875-2880, 1992
43) Seki T.: Effects of Kampo Medicine (Combined Application of *Minor Bupleurum Decoction*, *Cassia Twig Decoction plus Peony*) on Refractory Epilepsy, Oriental Medicine19: 16-22, 1995

In the field of Kampo therapy many attempts at improving the various problems or disturbances occurring during the developmental phase of children have been made. Kin et al. used Licorice, *Wheat and Chinese Date Decoction* for 8 pediatric patients with breath holding spells and intractable epilepsy to the antiepileptic agents, and reported clear findings of clinical efficacy with four complete responses and four effective responses[44]. Itakura et al. used *Licorice, Wheat and Chinese Date Decoction* for 24 patients with night terrors and reported finding an efficacy of 87%[45]. The formula *Liver-Inhibiting Powder* is also used for this disease. Several attempts have also been made for patients with autism or ADHD, in whom pharmacotherapy is difficult. Ida administered *Major Bupleurum Decoction*, *Cold Limbs Powder*, *Liver-Inhibiting Powder* and similar preparations to 30 autistic patients (including adults), in whom treatment had been initiated under the age of 13 years and described an overall improvement ratio including 100% improvement in sleep disorders, 88.9% improvement in hyperactivity, 71.4% improvement of temper tantrums, 78.3% improvement of panic attacks, 87.5% improvement for self-mutilation, 90.0% improvement of sudden outbursts of violence, 77.8% improvement of compulsive retention, 68.8% improvement in compulsive behavior, 80.0% improvement of ritual behavior, 83.3% improvement of unreasonability and 80.8% improvement in communication skills[46]. Okashima et al. used various different Kampo medicines in the treatment of severely handicapped children presenting night terrors, displaying violent behavior and similar symptoms and described favorable results obtained through this treatment. The formulas used included *Licorice, Wheat and Chinese Date Decoction* extract, *Liver-Inhibiting Powder* extract, *Modified Merry Life Powder* extract and similar preparations[47]. Takeuchi et al. treated various problems in children with developmental disorders (Asperger disorder, higher function autism, ADHD, extensive developmental disorders, mental retardation with autistic tendencies) with Kampo medicine and described 9 cases in which an improvement had been achieved[48].

Liver-Inhibiting Powder is a formula frequently used for diseases in this field. This formula was listed by the famous physician Xue Kai in his own textbook of pediatrics in the 16th century. It is particularly noteworthy that he added a statement that "both mother and child should take the drugs". As an excellent pediatrician he was well aware of the mother's influence on the child's diseases and thus

explained the importance of treating the mother as well when children are sick. A number of reports have described the practical application of this concept[49,50,51,52,53].

Egawa treated 97 patients with the Kampo medical pattern (SHO) of the *Liver-Inhibiting Powder* with *Tangerine Peel, Pinellia Rhizoma and Liver-Inhibiting Powder* and reported an efficacy of 55%. Although he is a pediatrician, he included mothers, aged 30-50, in his study. They were also treatred with this formula. The author explains that treating the mother facilitates follow-up observations of the children[54]. Nishimura et al. explained that the simultaneous treatment of mother and child based on historical views and the current variety of clinical applications can be substantiated citing multiple cases[55].

In the treatment of adult psychosomatic orders, Kampo medicine may not have any effect on the mental aspects. However, in children it is extremely effective for hyperactivity, tension, sleep disorders, tantrum and similar neuropsychologic symptoms. The situation here is markedly different from that in adults.

44) Kin M., Murata R., Matsuoka O. et al.: Effects of *Licorice, Wheat and Date Decoction* for Breath Holding Spells and Epileptic Children, The Journal of Pediatric Practice 47(2): 268-272, 1988

45) Itakura T., Yamaoka K., Konishi H..: Effects of *Licorice, Wheat and Chinese Date Decoction* for Night Crying, Sleep Drunkenness, Kampo Shinryo 11(12): 44-45, 1992

46) Iida M.: Autism The Journal of Pediatric Practice 67: 1489-1492, 2004

47) Okajima Y., Yamada T.: Usefulness of Kampo Extract Preparations for the Treatment of Night Crying, Excitation, Violence and the Like in Children with Severe Developmental Disorders, Iryo 43(6): 700-703, 1989

48) Takeuchi N., Ishizaki A.: Children with Developmental Disorders and Their Treatment with Oriental Medicine, Jpn. J. Pediatr. Surg. 37(3): 348-351, 2005

49) Egawa M.: Family Therapy Examples for School Refusal, Kampo Formula Manual, *Tangerine Peel, Pinellia Rhizoma plus Liver-Inhibiting Powder*, Shibunkaku Publications: 348-349, 1991

50) Egawa M.: Anorexia Nervosa, Kampo Formula Manual, *Tangerine Peel, Pinellia Rhizoma plus Liver-Inhibiting Powder*, Shibunkaku Publications: 348-349, 1991

51) Matsuda K.: Treatment of Mother and Child with Yokkan San Ka Shakuyaku in Cases of School Refusal, Practical Kampo Therapy Based on Cases, Sogensha: 169-170, 1992

52) Miyazaki Z.: Effectiveness of Simultaneous Treatment of Mother and Child with *Tangerine Peel, Pinellia Rhizoma plus Liver-Inhibiting Powder*, Journal of Kampo Medicine 42: 333-336, 1995

53) Kobayashi T., Nagasawa K.: One Case of Myospasia Impulsiva Where Simultaneous Treatment of Mother and Child with *Liver-Inhibiting Powder* was Markedly Effective, Kampo Igaku 27: 75, 2003

54) Egawa M., Matsuda K., Otsuka Y.: Clinical Trials for *Liver-Inhibiting Powder*, *Tangerine Peel, Pinellia Rhizoma plus Liver-Inhibiting Powder*, Kampo Medicine (Jap. Journal of Oriental Medicine) 38(4): 13-17, 1988

55) Nishimura K., Watanabe K.: Simultaneous Treatment of Mother and Child, The Journal of Pediatric Practice 67: 1514-1518, 2004

Yamaguchi, employed at a large hospital in Aichi prefecture, treats almost all conditions ranging from those encountered in a pediatric emergency room to many chronic diseases. While training many interns, and being the head of the pediatric department, he has at the same time a profound knowledge of Kampo medicine. He treated 89 patients with Kampo medicine (decoctions) for whom standard western medical treatment proved difficult and published the results. The overall improvement ratio of 64% was very positive. This work certainly verifies that Kampo medicine will play in the future a very important role in this field[56].

56) Yamaguchi H.: Kampo Therapy for Patients Difficult to Treat with Western Pharmacotherapy - Experience with Kampo decoction in pediatrics - The Journal of Pediatric Practice67: 1542-1546, 2004

Conclusions

Current Kampo therapy for a number of representative diseases has been described. Kampo medicine is a system with an extremely broad range of applications of which only a portion has been described here. Due to the lack of space, descriptions of the theoretical aspects of Kampo medicine have been kept to a minimum. A comprehensive list of these descriptions is found in cited references.

Manufacturing Process for the Prescriptions of Kampo Medicine

The large majority of Kampo Medicines manufactured by Japanese pharmaceutical companies are extract preparations (history of which has been previously described). There are over fifteen pharmaceutical companies in Japan who are manufacturing Kampo Medicine extracts with government approval. Their manufacturing is governed by the regulations of the Pharmaceutical Affairs Law, and strictly controlled by other government regulations, including GMP (Good Manufacturing Practice). The GMP for pharmaceutical products include (1) reduction of human errors to a minimum, (2) prevention of contamination of the drugs or deceasing quality, and (3) establishment of a system to guarantee high quality. As a result, products are assured of quality and safety at the highest level.

I. Quality Standards for Crude Drugs Used as Raw Material

Of all the crude drugs used as raw material for Kampo Medicine, about 200 major drugs (herbal medicines) are listed in the Japanese Pharmacopoeia (JP), which imposes quality standards on them. The quality standards provide detailed requirements for identifying the names of the original plant species (or original animal species or mineral for crude drugs derived from animals or minerals), parts used for medicinal purposes (e.g. roots, stems, leaves, flowers or fruits), preparation methods, methods of purity test and other physical/chemical tests for the purpose of quality evaluation, as well as the test methods for the presence of microbes.

Of all the crude drugs not listed in the JP, the ones in frequent use are published in the Japanese Herbal Medicine Codex (1989) which provides quality standards established by a research team organized by the government. Pharmaceutical companies must use crude drugs which comply with these quality standards as their raw material. Some crude drugs do not have official specifications such as those above. When this is the case, pharmaceutical companies develop their own specifications so as to ensure quality of their products.

At present, of the crude drugs listed in the Japanese Herbal Medicine Codex, widely used ones are in the process of being incorporated into the JP with upgraded quality standards.

II. Quality Control of Extracts

Extracts are manufactured in the following processes: First, liquid extract is made by processing cut crude drugs mixed according to a prescribed composition in hot water (separation of effluent and residual). Residues from the crude drugs are removed from the liquid extract. After the liquid is concentrated under reduced pressure, it is spray-dried into a powdered form. Next, the appropriate measures of the powdered extract and fillers (preparation materials) are mixed together to form a raw material for preparation. It is then processed into the form of granules or tablets, and filled and packaged as a finished product. As the Kampo Medicine extracts are highly hygroscopic, pharmaceutically advanced techniques are used to protect finished products from moisture. (For outline, see diagrams in pages 54-55.)

Initially, the quality of Kampo Medicine extracts released to market varied due to differences in manufacturing methods used by pharmaceutical companies. Consequently, the government issued an administrative guidance (notice) in 1985 in an attempt to ensure better quality and uniformity of these products. Generally, the administrative guidance (notice) prescribes that standard decoction must be prepared for each prescription with the prescribed method; that two or more indicator constituents ("Indicators") must be selected and quantified for the purpose of ensuring the equivalence between the final product and standard decoction; and that the amount of the "Indicators" contained in a daily dose must be 70% or more of the amount contained in the standard decoction.

Kanebo Pharmaceutical, Ltd. which agreed to an interview, is staunchly committed to quality. A consistent quality control system has been employed from the supply of crude drugs through to the finished products in order to ensure that the Kampo Medicine extracts for clinical use produced by Kanebo are equivalent in potency to the standard decoction. For this purpose, Kanebo uses several technical means to extract various constituents efficiently from crude drugs, and provide a stable supply of quality products.

The following example is provided.

(1) Obtaining crude drugs of predictable quality

① The quality of herbal medicines is influenced by the growing region and climate, so herbal medicines of predictable quality can be obtained by designating the area where each medicine is grown.

② To avoid deterioration in quality and bacterial contamination during the storage of herbal medicines, thermostatically controlled storage is used, and cut herbal medicines are stored at a low temperature.

③ A system has been established so that any problems with the quality of finished products can be traced back to a specific growing area.

(2) Management of the extraction process

The individual steps of the various processes from the extraction during the manufacture in the factory over separation of solids from liquids and concentration to the drying of the extract powder are conducted in extremely large-scale equipment. Neglecting quality control during any of these processes could have marked effects on the quality of these traditional formulas. The items listed below are carefully observed during the manufacturing process. Moreover, all processes are controlled via computer using an automatic control system.

① Measures to increase the dissolution rate of insoluble ingredients:
Saponins such as Bupleurum saponins, Ginseng saponins etc. are important ingredients and are insoluble. The surface structure of Ephedra herb is so tight that it prevents the penetration of water and this makes it difficult to dissolve ephedrine, a major ingredient. To promote the efficient dissolution of these ingredients, the particle sizes of these herbal medicines are adjusted appropriately.

② Measures to reduce the degradation of heat labile ingredients:
Sennosides of Rhubarb are pharmacologically active ingredients of a crude drug, and are representative heat labile substances. The sennoside content of a extract is dependent on the amount dissolved from Rhubarb and the extent of degradation. When heated at 100℃ for 1 hour, most sennoside is degraded and the cathartic effect is markedly decreased. To constantly maintain the sennoside content, extraction of Rhubarb is performed in a short time during the latter half of the extraction process.

③ Measures to prevent enzymatic reaction:
It has been reported that herbal medicines contain enzymes that degrade various ingredients. Baicalin is a major ingredient of Scutellaria root that is degraded by baicalinase to baicalein, while amygdalin (a major ingredient of Peach kernel and Apricot kernel) is degraded by emulsin. Generally, the optimum temperature range for enzyme activity is 35-40℃. Heating time is shortened in order to prevent enzymatic reaction.

④ Measures to preserve volatile ingredients:
Volatile ingredients, cinnamaldehyde in Cinnamon bark, paeonol in Tree peony bark, ligustilide in Szechwan lovage rhizoma etc., can diffuse out more during the graduation process. To maintain these ingredients in the finished product at the specified level, the effluent after extraction process is controlled below 60℃ at temperature and between quadruple to octuple in a graduation rate.

(3) Control of the manufacturing processes of extracts (final products)

The obtained extract powders are precisely weighed and then mixed with filling material before they are further processed into granules or tablets. The manufactured granules or tablets are then packed in aluminum foils (SP package) or else placed in containers. After that they are further wrapped and packed in boxes for shipment. In the factory, completely computerized production control systems have been introduced. Under this system, all the information pertaining to the manufacturing process, from the receptance of stocks to the shipment of the final products is completely controlled.

① After storing the various extract powders serving as crude materials for the products and filling materials in a warehouse with automatic temperature control, the production control system releases upon instruction from the warehouse only those materials passing quality tests from the warehouse into the production process.

② Weighing of prescription crude materials is conducted as an interactive process with the computer and all weighing results are stored in the computer.

③ After the extract powders and the filling materials are mixed during the manufacture of fine granular products, the system automatically manufactures the relevant granules.

④ Moreover, during the manufacture of tablets, a tablet, press observation device, tablet weighing device, a metal detector, and a transport device work in unison allowing unmanned operation.

⑤ All the steps involved in packaging or filling in containers of the granules or tablets obtained in above described steps (2), (3) and (4) are performed in a clean area.

⑥ Sensors are installed to detect whether the individual packages are properly packaged during the packaging process, controlling the entire system in such a way to prevent the necessity for replacements due to defective packages or products.

⑦ Products packaged on the individual lines are then transported by the automatic transfer system to the automated warehouse.

⑧ Untested products or non-standard products are locked out by the manufacturing control system and managed in a way that prevents them from being handled or shipped.

III. Prevention of Pesticide and Microbial Contaminations

Pesticides have low solubility in water, instability in heat, and are evaporative. Some residual pesticides may be found in a crude drug used as material. Less than one-tenth of the amount will be transferred to the heat-processed extract. The amount of the residue will be reduced below the detection limit in the final product, meeting the safety standard. Yet, with its strong commitment to quality and safety, Kanebo carries out a strict inspection of every batch of crude drugs it receives by measuring residual amounts of several types of organochlorine, organophosphorus and pyrethroid pesticides.

As crude drugs are natural products, the presence of some bacteria and fungus is unavoidable. The JP prescribes the baseline limit for presence of microbes in crude drugs and preparations made with crude drugs. Although almost all microbes are eliminated by heat during the extraction process, Kanebo employs a brief sterilization of graduated fluid and carries out an inspection for microbes in the final stage of the production to ensure the safety of its product. The company ships only products for which inspection has confirmed the microbial count to be below the baseline limit.

Although monographs of crude drugs may indicate their use in the form of pill or powder, they convert the amount specified in the monograph to water-extracted equivalent for its extract products. This in itself is irrelevant to the efficacy of our drugs, but it is significant in terms of the elimination of toxic elements such as microbial contamination.

IV. Environmental Protection

The factory of Kanebo, which we visited, met the standards of the ISO 14001: Environmental Management System.

The original text records the use of pills and powdered drugs. For our extracts we convert the amounts given in the original texts into the amount of aqueous extracts, a form which also allows to achieve a uniform distribution. This renders carrying the products easier and serves also the function of excluding contamination with bacteria or other hazardous substances.

Acknowledgements:

We thank Kanebo Pharmaceutical, Ltd., and Qingdao Huazhong Pharmaceutical, Co., Ltd. for providing information to cover this article.

Cutting raw herbal medicines

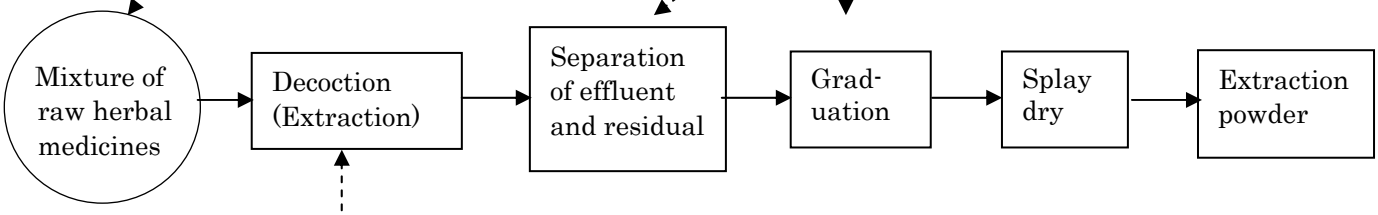
Store cut herbal medicines

Extraction tank

Top of separator of solid and liquid

To promote the efficient dissolution of insoluble ingredients, the particle sizes of herbal medicines are adjusted appropriately.

To maintain volatile ingredients in the finished product at the specified level, the effluent after extraction process is controlled below 60℃ at temperature and lowered in a graduation rate.



1) To maintain the sennoside content, extraction of Rhubarb is performed in a short time during the latter half of the extraction process.
2) Heating time may be shortened in order to prevent enzymatic reaction.

Residua/disposal after solid/liquid separation

Instant fungus reduction machine

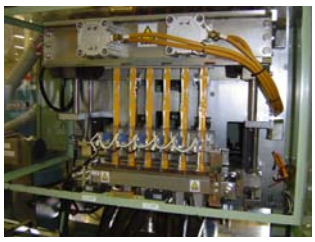
Hot-air generator for drying

Central control room

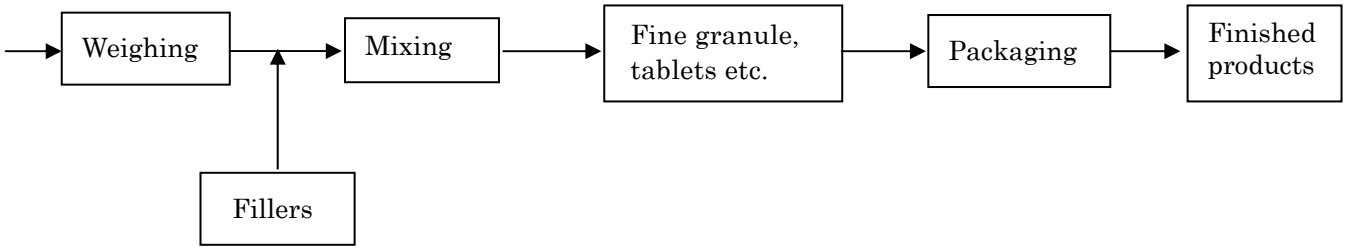
Weighing

Mixing

Granulating tablets



SP packaging



Automatic Transfer System

Automated Warehouse

Quality Evaluation of Kampo Medical Extracts

As has been introduced in section "Manufacturing Process of Kampo Medicine", the quality of Kampo medical extracts is strictly controlled in the Kanebo factory producing these extracts. Appropriate quality assurance requires the provision of suitable analytical technologies. This section will introduce a portion of Kanebo's quality management.

I. Analytical evaluation of crude drugs

The quality of the crude drugs directly influences the final extract products. In order to verify that the delivered crude galenicals meet our company's standards, they are upon receipt subjected to rigorous examinations.

The Japanese Pharmacopoeia and the Japanese Herbal Medicine Codex, naturally provide that the material is thoroughly inspected and subjected to morphologic examinations under the microscopic. For identification and quantitative measurements of indicator substances (as outlined in the "Manufacturing Process of Kampo Medicine II") and similar physical examinations, including loss on drying, purity test, total ash, acid-insoluble ash, extract content, essential oil content etc.; applicable standards and test methods are defined. In addition to these items Kanebo performs its own unique tests like microbial tests and residual agricultural chemical examinations.

Microbial tests:

This includes testing for viable cell counts with microbial limit tests for aerobic bacteria, fungi and yeasts, as well as measurement of enteric bacteria and other Gram-negative bacteria and identification of Escherichia coli, Salmonella and Staphylococcus aureus with specific microorganism tests.

Residual agricultural chemical examinations:

These tests are performed to determine organic chlorine pesticides (Total BHC's, total DDT's etc.), organic phosphorous pesticides (Diazinon, Malathion, Parathion etc.) and pyrethroids (Cypermethrin, Fenvalerate) and similar pesticides. Organic chlorine pesticides and pyrethroids are measured using gas chromatographs equipped with electron capture detectors (ECD), whereas for the organic phosphorous pesticides, mesurements using gas chromatographs equipped with flame photometric detectors (FPD) are frequently employed. These devices are characterized by their outstanding detectability and selectivity.

II. Extract quality evaluation

In order to perform quality checks of extract powders for each lot obtained by drying the extracts after mixing the crude drugs based on individual formula compositions, the materials are subjected to identification, quantitative tests, loss on drying, purity tests, total ash, acid-insoluble ash, extract content, microbial tests and residual agricultural chemical examinations. The results of these analyses have to meet specified evaluation criteria.

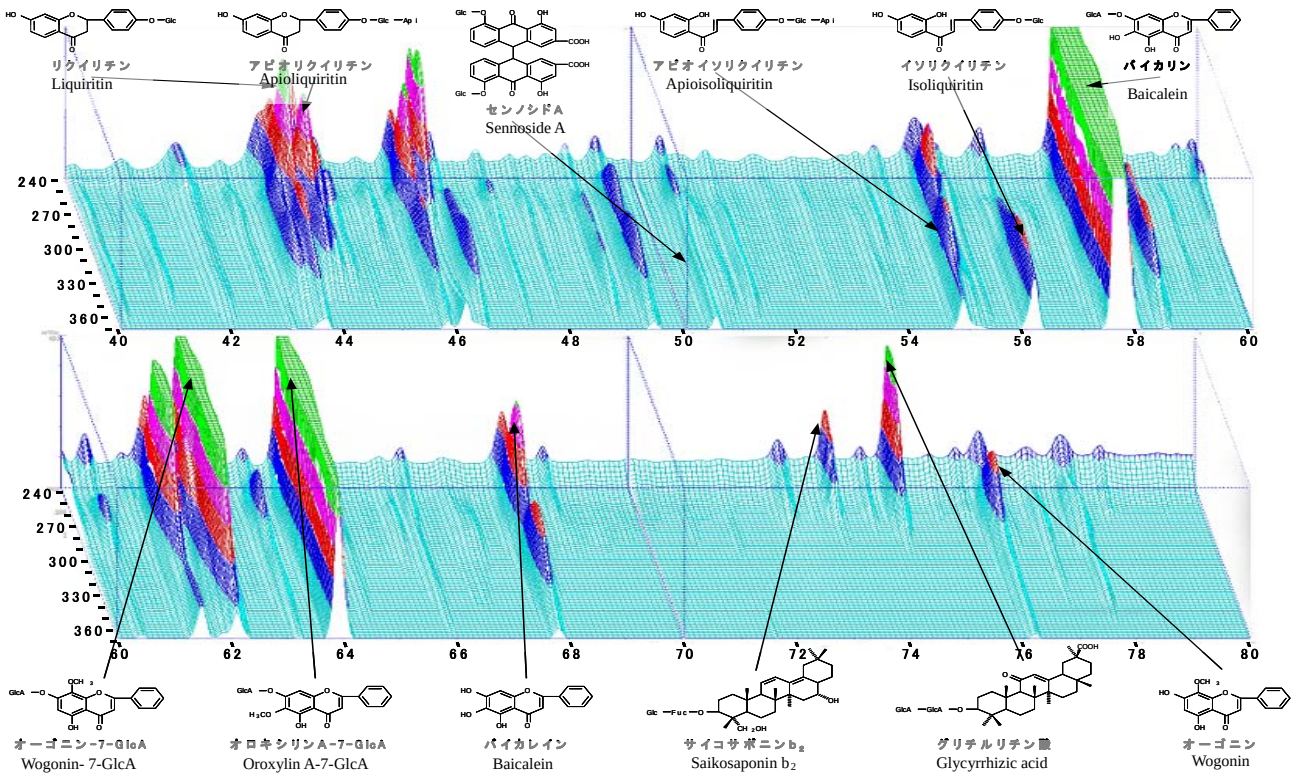
Moreover, to test whether the quality of the extract powder is constant, or if the material has been mixed with other galenicals, the gradient method chromatographs equipped with photodiode array detectors (PAD) is employed even during HPLC analysis. Sequential modification of the solvent ratio in the mobile phase results in successive elution of components with differing properties and renders visual comparison of multiple components with continuous wavelengths with a Multi-wavelength device easier. This procedure is excellent at identifying impurities.

III. Product (final products) quality evaluation

Each lot of the final products including the addition of diluting agents to the extract powders to produce the commercial products is subjected to identification, quantitative tests, loss on drying, purity tests, measurement of total ash, acid-insoluble ash, extract content, microbial tests, residual agricultural chemical examinations and additionally to product tests investigating deformations etc. i.e. particle size distribution tests for preparation disintegration tests and mass variation tests.

These test results are registered in the master computer and the system is built, so that only products confirmed to meet specific evaluation criteria will be shipped.

A 3-dimensional chromatogram of the "B"Character Decoction extract



Setting for microbial testing

Example of analyzing devices (HPLC)

Herbs Covered by Health Insurance in Japan

Yoshiro Sahashi

Herbal medicines have been used for more than 1500 years in Japan. Despite the decision of the new government in the Meiji era to adopt Western medicine, the sale of herbal medicines at drug stores throughout Japan has continued, and these drugs are in popular use. Pharmacologists have studied these herbs and achieved noteworthy results, including identification of the medicinal properties and the active ingredients. For example, Chokichi Nagai isolated ephedrine from the herb called Mao (Ephedra). Japanese investigators have also been playing a leading role in research in this field. Many research findings have been reported in various journals, such as the Journal of Traditional Medicines and Natural Medicines.

When the National Health Insurance (NHI) system was started in Japan, some medicinal herbs were listed on NHI drug price tariff, besides a number of Western medicines, so that they could be used for "prescriptions based on Kampo (Traditional Chinese Medicine: TCM) theories". In 1965, 43 herbal medicines were covered by insurance. This was very favorable for the subsequent progress of TCM in Japan, and served as a base for later authorization of some of the herb preparations for overall medical use under the NHI system. At present, about 200 herbal medicinal preparations are covered by the NHI in Japan.

Types and trend of use of herbal medicines covered by insurance

At present, about 200 herbal medicines are covered by the NHI in Japan. Some tendencies related to traditions of Japan can be recognized in the types of herbs that were covered by insurance. As described in the section on History, the prescriptions recommended in the classical monographs "Shang han lun" and "Jingui Yaolue" began to be used frequently in TCM in Japan, as early as in the 18th century. As a result, the herbs needed for these prescriptions began to be used widely in Japan and they started to become freely available in the market. This tendency to attach importance to classical monographs continued even through the 1930s, when use of TCM was revived in Japan. Adoption of herbs listed on the NHI drug price tariff was also affected by this tendency. At present, all herbs used for TCM preparations for medical use, except for Shinkiku (Medicated leaven), are covered by the NHI. Of course, a large number of herbs not covered by insurance, are also available in the market for clinical use, even if the cost needs to be borne completely by the patient. Most of the prescriptions used in China at present can also be administered in Japan. Thus, there are no problems relating to the clinical use of such prescriptions in Japan.

Herbal medicines unique to Japan

More than 90% of the herbs consumed in Japan are imported from foreign countries. Such dependence on imported herbs has continued ever since TCM was first introduced in Japan from the Korean Peninsula and China. During this period, Japanese investigators sought similar herbs in Japan, and in fact, discovered several that can be used in place of the imported herbs. About 300 years ago, during the Tokugawa Shogunate era, cultivation and collection of Japanese herbs were recommended within the framework of the economic policy. As a result, some herbs unique to Japan began to be marketed, including Boi (Orientive Stem), Toki (Japanese Angelica Root), Oren (Coptis Rhizoma), Saiko (Bupleurum Root) and Byakujutsu (Atractylodes Rhizoma). Ninjin (Ginseng) had been entirely imported until that time, and was, therefore, very expensive (various anecdotes have been documented relating to this herb).

Through the efforts of government officials, cultivation of several herbs was conducted successfully in Fukushima, Nagano and Shimane prefectures. Early in the 18th century, these herbs began to be exported to foreign countries. (The current situation on these herbs is slightly complex, since large amounts of these herbs are now imported, and some amounts are exported.)

For the reasons mentioned above, several herbs with different origins from those used in China are now used in Japan. These herbs are also included in the official compendium (e.g., Japanese Pharmacopoeia) prepared by the Ministry of Health, Labour and Welfare. Examples are cited in the next page.

Boi: In China, this is referred to as *Stephania tetrandra*. In the Japanese Pharmacopoeia, it is described as *Sinomenium acutum* (in China, *Sinomenium acutum* refers to another herb called Seihuto). However, it has been shown through data from many clinical cases, that Japanese Boi can be used as Chinese Hun-boi.

Toki (Japanese angelica root): In China, this is referred to as *Angelica sinensis*. In Japan, it is more often referred to as *Angelica acutiloba* or *var. sugiyama*. It is grown in diverse areas, including Hokkaido and the Honshu region (the main island of Japan).

Oren (Coptis rhizoma): In China, this is referred to as *Coptis chinensis*. In Japan, it is generally referred to as *C. japonica*. Oren grown in Japan is a vivid yellow and was exported to China for some time as high-quality Oren.

Senkyu (Cnidium rhizoma): In China, this is referred to as *Ligusticum chuanxiong*. In Japan, it is referred to as *Cnidium officinale*, belonging to the umbelliferous family. It is widely grown in Hokkaido and some other districts.

Byakujutsu (Atractylodes rhizoma): In China, this is referred to as *Atractylodes ovata*; in Japan, it is generally referred to as *A. japonica*. *A. japonica* contains large amounts of essential oil. *A. japonica* is superior to *A. ovata* in terms of its composition.

For some herbal medicinal plants, the part of the plant used as medicine is unique in Japan. For example, "Keishi" makes used of the bark of *Cinnamomum Cassia*, but doesn't use the fresh branches. The bark of *Cinnamomum Cassia* is called "Keihi". The term Saishin (Asiasarum Root) is used when only the root, after the parts above the ground are discarded. The part of Saishin above the ground contains aristolochic acid, which has strong nephrotoxicity. In Japan, not only the parts of Saishin above the ground, but also other herbs containing aristolochic acid (Koboi: Aristolochia fangchi, Kanmokutsu: Stem of Aristolochia manshuriensis, etc.) are banned from the market.

Herb testing standards

The Japanese Pharmacopoeia (JP) stipulates standards for herbs, including identification, purity, ash content, loss on drying, composition, etc. Standards on contamination by agrochemicals, heavy metals, bacteria, etc. are stipulated for some herbs in the JP. However, herb manufacturers in Japan conduct tests on their herb preparations for these contaminants, even when no standards are stipulated in the JP. In Japan although a large proportion is still imported from foreign countries, only herb products that have passed stringent tests of quality, are distributed in the market.

The herbal medicines covered by the NHI in Japan are listed in the table on the next page.

Chinese Herbs Covered by Medical Insurance

ENGLISH NAME	BOTANICAL NAME	CHINESE NAME	JAPANESE NAME	TASTE	CHARACTER
Akebia Stem	Akebia quinata or A. trifoliata	Bai Mu tong(白木通)	Mokutsu	Bitter	Cold
Aloes	Aloe ferox	Lu hai(芦薈)	Aroe matsu	Bitter	Cold
Amomum Seed	Amomum xanthioides	Sha ren(砂仁)	Syukusya	Sour	Warm
Amomum Seed powder	Amomum xanthioides	Sha ren fen(砂仁粉)	Syukusya matsu	Sour	Warm
Anemarrhena Rhizoma	Anemarrhena ashodeloides	Zhi mu(知母)	Chimo	Bitter,sweet	Cold
Angelica Dahurica Root	Angelica dahurika	Bai zhi(白芷)	Byakushi	Pungent	Warm
Apricot Seed	Prunus armeniaca or P. armeniaca var. ansu	Xing ren(杏仁)	Kyonin	Bitter	Slightly warm, slightly poisonous
Areca Seed	Areca catechu	Bing lang(檳榔)	Binroji	Pungent, bitter	Warm
Areca Seed powder	Areca catechu	Bing lang fen(檳榔粉)	Binroji matsu	Pungent, bitter	Warm
Arece Peel	Areca catechu etc	Da fu pi(大腹皮)	Daihukuhi	Bitter	Slightly warm
Argy Wommood Leaf	Artemisia princeps 、A. montana	Ai ye(艾葉)	Gaiyo	Bitter, pungent	Warm
Arisma Rhizoma	Alisma orientale	Ze xie(沢瀉)	Takusya	Sweet, tasteless	Cold
Arisma Rhizoma powder	Alisma orientale	Ze xie fen(沢瀉粉)	Takusya matsu	Sweet, tasteless	Cold
Artemisia Capillaris Flower	Artemisia capillaris	Yin chen hao(茵蔯蒿)	Intinko	Bitter	Slightly cold
Asiasarum Root	Asiasarum heterotropoides var. mandshuricum	Xi xin(細辛)	Saishin	Pungent	Warm
Asiatic Cornelian Cherry Fruit	Cornus officinalis	Shan zhu yu(山茱萸)	Sansyuyu	Sour	Slightly warm
Ass Hide Glue	Ass	E jiao(阿膠)	Akyo	Sweet	Mild (Natural)
Astragalus Root	Astragalus mongholicus	Huang qi(黄耆)	Ogi	Sweet	Slightly warm
Astragalus Root powder	Astragalus mongholicus	huang qi fen(黄耆粉)	Ogi matsu	Sweet	Slightly warm
Atractylodes Lancea Rhizoma	Atractylodes lancea	Cang zhu(蒼朮)	Sojutsu	Sour, bitter	Warm
Atractylodes Lancea Rhizoma powder	Atractylodes lancea	Cang zhu fen(蒼朮粉)	Sojutsu matsu	Sour, bitter	Warm
Atractylodes Ovatae Rhizoma	Atractylodes ovata	Bai zhu(白朮)	Byakujutsu	Bitter, sweet	Warm
Atractylodes Ovatae Rhizoma powder	Atractylodes ovata	Bai zhu fen(白朮粉)	Byakujutu matsu	Bitter, sweet	Warm
Atractylodes Rhizoma	Atractylodes japonica or Atractylodes ovata	Bai zhu(白朮)	Byakujutsu	Bitter, sweet	Warm
Atractylodes Rhizoma powder	Atractylodes japonica	Bai zhu fen(白朮粉)	Byakujutu matsu	Bitter, sweet	Warm
Balloonflower Root	Platycodon grandiflorum	Jie geng(桔梗)	Kikyo	Bitter, sour	Mild (Natural)
Balloonflower Root powder	Platycodon grandiflorum	Jie geng fen(桔梗粉)	Kikyo matsu	Bitter, sour	Mild (Natural)
Bambusae caulis in taeniis	Bambusa tuldoides	Zhu ru(竹茹)	Chikujo	Sweet	Slightly cold
Barbary Wolfberry Fruit	Lycium barbarum	Gou qi zi(枸杞子)	Kukosi	Sweet	Mild (Natural)
Bark of Mulberry Root	Morus alba	Sang bai pi(桑白皮)	Sohakuhi	Sweet	Cold
Biond Magnolia Flower-bud	Magnolia biondii etc	Xin yi(辛夷)	Shin'i	Pungent	Warm
Black Seasame	Sesamum indicum	Hei zhi ma(黒芝麻)	Goma	Sweet	Mild (Natural)
Bunge Pricklyash	Zanthoxylum bundeanum	Hua jiao(花椒)	Kasyo	Pungent	Hot, slightly poisonous
Bupleurum Root	Bupleurum falcatum	Chai hu(柴胡)	Saiko	Pungent, bitter	Slightly cold
Cape Jasmine Fruit	Gardenia jasminoides	Zhi zi(梔子)	Sanshishi	Bitter	Cold
Cape Jasmine Fruit powder	Gardenia jasminoides	Zhi zi fen(梔子粉)	Sanshishi matsu	Bitter	Cold
Cardamon	Amomum cardamomum	Xiao dou cou(小豆蔻)	Shozuku	Pungent	Warm
Cardamon powder	Amomum cardamomum	Xiao dou cou fen(小豆蔻粉)	Shozuku matsu	Pungent	Warm
Cassia Bark (Cinnamon Bark)	Cinnamomum Cassia	Rou gui(肉桂)	Keihi	Pungent, sweet	Hot
Cassia Bark (Cinnamon Twig)	Cinnamomum Cassia	Gui zhi (桂枝)	Keishi	Pungent, sweet	Warm
Cassia Bark powder	Cinnamomum Cassia	Rou gui fen(肉桂粉)	Keihi matsu	Pungent, sweet	Hot
Cassia Seed	Cassia obutusifolia or C. tora	Jue ming zi(決明子)	Ketsumeishi	Sweet, bitter, salty	Slightly cold
Chinese Clematis Root	Clematis chinensis	Wei ling xian(威霊仙)	Ireisen	Sour, salty	Warm
Chinese Gentian	Gentiana scabra	Long dan cao(竜胆草)	Ryutan	Bitter	Cold
Chinese Gentian powder	Gentiana scabra	Long dan cao fen(竜胆草粉)	Ryutan matsu	Bitter	Cold
Chinese Ligusticum Rhizoma	Ligusticum sinense etc	Gao ben(藁本)	Kohon	Pungent	Warm
Chinese Waxgourd Seed	Benincasa cerifera or B.cerifera forma emarginta	Dong gua zi(冬瓜子)	Togashi	Sweet	Cold
Chrysanthemum Flower	Chrysanthemum morifolium	Ju hua(菊花)	Kikuka	Sweet, slightly bitter	Slightly cold
Cicada Slough	Cryototympana atrata(pustulata) etc	Chan tui(蝉蛻)	Sentai	Sweet	Cold
Cimicifuga Rhizoma	Cimicifuga dahurica and C.heracleifolia	Sheng ma(升麻)	Shoma	Pungent, sweet	Slightly cold
Clove	Syzgium aromaticum	Ding xiang(丁香)	Cyoji	Pungent	Warm
Clove powder	Syzgium aromaticum	Ding xiang fen(丁香粉)	Choji matsu	Pungent	Warm
Cnidium Rhizoma	Cnidium officinale	Chuan xiong(川芎)	Senkyu	Pungent	Warm
Cnidium Rhizoma powder	Cnidium officinale	Chuan xiong fen(川芎粉)	Senkyu matsu	Pungent	Warm
Coastal Glehnia Root	Glehnia littoralis	※2	Hamabohu	Slightly sweet	Slightly cold
Cochinchinese Asparagus Root	Asparagus cochinchinensis	Tian men dong(天門冬)	Tenmondo	Sweet, bitter	Extremely cold
Coix Seed	Coix lachryma-jobi var.mayuen	Yi yi ren(薏苡仁)	Yokuinin	Sweet, tasteless	Slightly cold
Coix Seed powder	Coix lachryma-jobi var.mayuen	Yi yi ren fen(薏苡仁粉)	Yokuinin matsu	Sweet, tasteless	Slightly cold
Combined Spicebush Root	Lindera strychnifolia	Wu yao(烏薬)	Uyaku	Pungent	Warm
Common Cnidium Fruit	Cnidium monnieri	She chuang zi(蛇床子)	Jyasyoushi	Pungent, bitter	Warm
Common Floweringquince Fruit	Chaenomeles lagenaria	Mu gua(木瓜)	Syuhimokka	Sour	Warm
Common Selfheal Fruit-spike	Prunella vulgaris	Xia ku cao(夏枯草)	Kagoso	Bitter, pungent	Cold
Coptis Rhizoma	Coptis chinensis	Huang lian(黄連)	Oren	Bitter	Cold
Coptis Rhizoma powder	Coptis chinensis	Huang lian fen(黄連粉)	Oren matsu	Bitter	Cold
Crataegus	Crataegus cuneata	Shan zha zi(山査子)	Sanzashi	Sour, sweet	Slightly warm
Dioscorea Rhizoma	Dioscorea batatas	Shan yao(山薬)	Sanyaku	Sweet	Mild (Natural)
Divaricate saposhnikovia Root	Aposhnikovia divaricate	Fang feng(防風)	Bohu	Pungent, sweet	Cold
Double-teeth Pulbescent Angelica Root	Angelica pubeacens or A. pubeacens Form biserrata etc	Du huo(独活)	Todokukatsu	Sour, bitter	Warm
Dragon's bone	Big fossil animal bone	Long gu(竜骨)	Ryukotsu	Sweet, astringent	Slightly cold
Dried Bitter-Orange Peel	Citrus aurantium	Chen pi(橙皮)	Tohi	Pungent, slightly bitter	Warm
Dried Ginger	Zingiber officinale	Gan jiang(干姜)	Syokyo	Pungent	Hot
Dried Ginger powder	Zingiber officinale	Gan jiang fen(干姜粉)	Shokyo matsu	Pungent	Hot
Dried Rehmannia Root	Rehmannnia glutinosa var hueichingensis	Shen di huang(生地黄)	Jio	Sweet, bitter	Cold
Ephedra	Ephedra sinica	Ma huang(麻黄)	Mao	Pungent, slightly bitter	Warm

ENGLISH NAME	BOTANICAL NAME	CHINESE NAME	JAPANESE NAME	TASTE	CHARACTER
Eucommia Bark	Eucommia ulmoides	Du zhong(杜仲)	Totyu	Sweet	Warm
Evodia Fruit	Evodia rutaecarpa or E..officinalis	Wu zhu yu(吳茱萸)	Gosyuyu	Pungent	Hot, bitter, poisonous
Fennel	Foeniculum vulgare	Xiao hui xiang(小茴香)	Uikyo	Pungent	Warm
Figwort Root	Scrophularia ningpoensis or S. buergeriana	Xuan shen(玄参)	Genjin	Bitter, sweet, salty	Cold
Fineleaf Schizomepeta herb	Schizonepeta tenuifolia	Jing jie(荊芥)	Keigai	Pungent	Slightly warm
Forsythia Capsule	Forsythia suspensa	Lian qiao(連翹)	Rengyo	Bitter	Slightly cold
Fourleaf Ladybell Root	Adenophora tetraphylla or A. axilliflora	Nan sha shen(南沙参)	Syajin	Sweet	Slightly cold
Fourstamen Stephania Root	Stehania tetorandora	Fang ji(防已)	Hun boi	Bitter,sour	Cold
Fresh Ginger	Zingiber officinale	Sheng jiang(生姜)	Sensyokyo	Pungent	Slightly warm
Fresh Rehmannia Root	Rehmannnia glutinosa var hueichingensis	Xian di huang(鮮地黄)	Jio	Sweet, bitter	Cold
Galangal Rhizoma	Alpinia officinarum	Gao liang jiang(高良姜)	Ryokyo	Pungent	Hot
Gambir powder	Acacia catechu	Hai er cha(孩儿茶)	Asen'yaku matsu	Bitter, astringent	Mild (Natural)
Gambirplant Hooked Stem and Branch	Uncaria rhynchophylla or U. sinensis	Gou teng(鈎藤)	Chotoko	Sweet	Slightly cold
Gentian Root	Gentiana lutae	Europian herb. No Chinese	Gentiana	Sweet, bitter	
Geranium Herb	Geranium thunbergii	Lao guan cao(老鸛草)	Gennosyouko	Bitter, slightly pungent	Mild (Natural)
Geranium Herb powder	Geranium thunbergii	Lao guan cao fen(老鸛草粉)	Gennosyouko matsu	Bitter, slightly pungent	Mild (Natural)
Ginseng	Panax ginseng	Ren shen(人参)	Ninjin	Sweet, slightly bitter	Mild (Natural)
Great Burdock Achene	Arctium lappa	Niu ban zi(牛蒡子)	Goboshi	Pungent, bitter	Cold
Gypsum (Calcium Sulphate Dihydrate)	CaSO4·2H2O	Shi gao(石膏)	Sekko	Pungent, sweet	Extremely cold
Hawthorn Fruit	Crataegus pinnatifida var. major	Shan zha rou(山査肉)	Sanzashi	Sour, sweet	Slightly warm
Hemp Seed	Cannabis sativa	Huo ma ren(火麻仁)	Mashinin	Sweet	Mild (Natural)
Honey		Feng mi(蜂蜜)	Hatimitsu	Sweet	Mild (Natural)
Honeysuckle Stem	Lonicera japonica	Ren dong teng(忍冬藤)	Nindo	Sweet	Cold
Houttuynia Herb	Houttuynia cordata	Yu xing cao(魚腥草)	Juyaku	Pungent	Slightly cold
Immature Bitter Orange	Citrus aurantium	Zhi qiao(枳殼)	Kijitsu(Kikoku)	Bitter, pungent	Slightly cold
Indian Bread Exodermis	Poria cocos	Fu shen(茯神)	Bukuryo	Sweet tasteless	Mild (Natural)
Jackinthepulpit Tuber	Arisaema consanguineum etc	Tian nan xing(天南星)	Tennannsyo	Bitter, sour	Warm, poisonous
Japanese Angelica Root	Angelica acutiloba or var.sugiyamae	Dang gui(当帰)	Toki	Sweet, pungent	Warm
Japanese Angelica Root powder	Angelica acutiloba or var.sugiyamae	Dang gui fen(当帰粉)	Toki matsu	Sweet, pungent	Warm
Japanese Dwarf Quince	Chaenomeles sinensis	Ming zha(榠楂)	Mokka	Sour	Warm
Japanese Pagodatree Flower-bud	Sophora japonica	Huai mi(槐米)	Kaika	Slightly cold	Slightly cold
Jujube (Chinese Date)	Zizyphus jujuba var.inermis	Da zao(大棗)	Taiso	Sweet	Warm
Kaolinum	Hydrated halloysite(Al203・2Si02・2H20・4H20)	Hua shi(軟滑石)	Kasseki	Sweet, tasteless	Cold
Lalang Grass Rhizoma	Imperata cylindrica	Mao gen(茅根)	Bokon	Sweet	Cold
Licorice Root	Glycyrrhiza uralensis	Gan cao(甘草)	Kanzo	Sweet	Mild (Natural)
Licorice Root powder	Glycyrrhiza uralensis	Gan cao fen(甘草粉)	Kanzo matsu	Sweet	Mild (Natural)
Lightyellow Shora Root	Sophora flavescens	Ku shen(苦参)	Kujin	Bitter	Cold
Lightyellow Shora Root powder	Sophora flavescens	KU shen fen(苦参粉)	Kujin matsu	Bitter	Cold
Lily Bulb	Lilium lancifolium, L..brownii var. colchesteri etc	Bai he(百合)	Byakugo	Sweet, slightly bitter	Mild (Natural)
Lithospermun Root	Lithospermum erythrorhizon	Zi cao(紫草)	Shikon	Sweet	Cold
Lobed Kudzuvine Root	Pueraria lobata	Ge gen(葛根)	Kakkon	Sweet, pungent	Cool
Longan Aril(Longan Fruit)	Euphoria longana	Long yan rou(竜眼肉)	Ryuganniku	Sweet	Slightly warm
Lonicerae Fros	Lonicera japonica	Jin yin hua(金銀花)	Kinginka	Sweet	Cold
Loquat Leaf	Eriobotrya japonica	Pi pa ye(枇杷葉)	Biwayo	Bitter	Cold
Lotus Seed	Nelumbo nucifera	Lian zi(蓮子)	Renniku	Sweet, astingent	Mild (Natural)
Lycium Bark	Lycium chinense	Di gu pi(地骨皮)	Jikoppi	Sweet, tasteless	Slightly warm
Magnesium sulfate	MgSO4・7H2O	※2	MgSO4・7H20	Salty, bitter	Extremely Cold
Magnolia Bark	Magnolia obovata, M. officinalis or M. officinalis var.biloba	Hou po(厚朴)	Koboku	Bitter, sour	Warm
Magnolia Bark powder	Magnolia obovata, M. officinalis or M. officinalis var.biloba	Hou po fen(厚朴粉)	Koboku matsu	Bitter, sour	Warm
Malt	Hordeum vulgare	Mai ya(麦芽)	Bakuga	Sweet	Mild (Natural)
Malt Sugar	Rice & Malt	Yi tang(飴糖)	Ame(Koi)	Sweet	Warm
Mandarin Orange Peel	Citrus reticulata	Chen pi(陳皮)	Chinpi	Bitter, sour	Warm
Mandarine Orange Peel	Citrus reticulata	Chen pi(陳皮)	Kippi	Bitter, sour	Warm
Mirabilite	Nature Na2SO4・10H2O	Mang xiao(芒硝)	Na2SO4・10H2O	Salty, bitter	Extremely Cold
Mud Tortoise Carapace	Amyda japonica or A. sinensis	Bie jia(鼈甲)	Dobekko	Salty	Cold
Myrobalan	Terminalia chebula	He zi(訶子)	Kasi	Bitter, sour, astringent	Mild (Natural)
Nandinae Fructus	Nandina domestica and forma leucocarpa	Nan tian zhu zi(南天竹子)	Nantenjisu	Sour, sweet	Mild (Natural)
Nature Chrysanthemum Flower	Chrysanthemum indicum	Ye ju hua(野菊花)	Kikuka	Bitter, pungent	Slightly cold
Non-prepared Aconiti tuber	Aconitum carmichaeli	Wu tou(烏頭)	Uzu	Pungent, bitter	Extremely hot, great poisonous
Nuphar Rhizoma	Nuphar japonicum	None in China	Senkotsu	Slightly bitter	Slightly cold
Nutgrass Galingale Rhizoma	Cyperus rotundus	Xiang fu(香附)	Kobushi	Pungent	Slightly bitter
Nutgrass Galingale Rhizoma powder	Cyperus rotundus	Xiang fu fen(香附粉)	Kobushi matsu	Pungent	Slightlly bitter
Nutmeg Seed	Myristica fragrans	Rou dou kou(肉豆蔻)	Nikuzuku	Pungent	Warm
Ophiopogon Tuber(Dwarf Lilyturf Root)	Ophiopogon japonicus	Mai dong(麦冬)	Bakumondo	Sweet, slightly bitter	Slightly cold
Orientive Stem	Sinomenium acutum	Qing feng teng(青風藤)	Boi	Bitter	Mild (Natural)
Oyster Shell	Oatrea gigas	Mu li(牡蛎)	Borei	Salty,astringent	Slightly cold
Oyster Shell powder	Oatrea gigas	Mu li fen(牡蛎粉)	Borei matsu	Salty,astringent	Slightly cold
Panax Japonicum Rhizoma	Panax japonica	Zhu jie shen(竹節参)	Chikusetsuninjin	Sweet,slightly bitter	Slightly warm
Peach Seed (Peach Kamel)	Purunus persica or var.davidiana	Tao ren(桃仁)	Tonin	Bitter	Mild (Natural)
Perilla Herb(Perilla Leaf)	Perilla frutescens etc	Zi su cao(紫蘇葉)	Soyo	Pungent	Warm
Perlla Fructus	Perilla frutescens etc	Su zi(蘇子)	Shisoshi	Sour	Warm
Persimmon Calyx	Diospyos kaki	Shi di(柿蒂)	Shitei	Bitter astringent	Mild (Natural)
Peucedanum praeruptorum (Peucedanum decurisivum)	Peucedanum praeruptorum	Qien hu(前胡)	Zenko	Bitter,sour	Slightly cold
Pharbitis Seed	Pharbitis nil or P. purpurea	Qian niu zi(牽牛子)	Kengoshi	Bitter	Cold,poisonous
Phellodendron Bark	Phellodendron amurense	Huang bai(黄柏)	Obaku	Bitter	Cold

ENGLISH NAME	BOTANICAL NAME	CHINESE	JAPANESE NAME	TASTE	CHARACTER
Phellodendron Bark powder	Phellodendron amurense	Huang bai fen(黄柏粉)	Obaku matsu	Bitter	Cold
Pinellia Tuber	Pinellia ternata	Bab xia(半夏)	Hange	Sour	Warm,poisonous
Plantago Herb	Plantago asiatica	Che qian (車前)	Syazenso	Sweet	Cold
Plantago Seed	Plantago asiatica	Che qian zi(車前子)	Syazenshi	Sweet	Cold
Polyporus Sclerotium	Polyporus umbellatus	Zhu ling(猪苓)	Chorei	Sweet, tasteless	Mild (Natural)
Prepared Aconiti Daughter Tuber	Aconitum carmichaeli	Fuzi(附子)	Busi	Pungent	Hot, poisonous
Prepared Aconiti Tuber	Aconitum carmichaeli	Fuzi(附子)	Hobushi	Pungent	Hot, poisonous
Prepared Coastal Glehnia Root	Glehnia littoralis	Sha shen(沙参:北沙参)	Hokusyajin※	Sweet	Slightly cold
Prepared Dried Ginger	Zingiber officinale	Chi gan jiang(赤干姜)	Kankyo	Pungent	Hot
Prepared Rehmannia Root	Rehmannnia glutinosa var hueichingensis	Shou di huang(熟地黄)	Jio(juku)	Sweet	Slightly warm
Pruni Cortex	Purunus jamasakura	Japanese herb.(桜皮)※2	Ohi	Slightly	Mild (Natural)
Puncturevine Cltrop Fruit	Triburus terrestris	Ji li(蒺藜)	Shiturishi	Bitter, pungent	Mild (Natural)
Quercus Bark	Quercus acutissima etc	Hu pi(槲皮)	Bokusoku	Bitter	Mild (Natural)
Red Ginseng	Panax ginseng	Hong shen(紅参)	Kojin	Sweet, slightly bitter	Warm
Red Ginseng powder	Panax ginseng	Hong shen fen(紅参粉)	Kojin matsu	Sweet, slightly bitter	Warm
Red Peony Root	Peonia lactiflora	Chi shao(赤芍)	Sekisyaku※	Bitter	Slightly cold
Rhizoma and Root Forbes Notopterygium	Notopterygium incisum or N. forbesii	Qiang huo(羌活)	Kyokatsu	Pungent, bitter	Warm
Rhubarb	Rheum palmatum and R.tanguticum	Da huang(大黄)	Daio	Bitter	Cold
Rhubarb powder	Rheum palmatum and R.tanguticum	Da huang fen(大黄粉)	Daio matsu	Bitter	Cold
Rice(Oryza Seed)	Oryza sativa	Jing mi(粳米)	Kobei	Sweet	Mild (Natural)
Rose fruit	Rosa multiflora	Ying shi(営実)	Eijitu	Sour	Slightly cool
Rose fruit powder	Rosa multiflora	Ying shi fen(営実粉)	Eijitu matsu	Sour	Slightly cold
Safflower	Carthamus tinctorius	Hohg hua(紅花)	Koka	Pungent	Warm
Saffron	Crocus sativus	Xi hong huo(西紅花)	Sahuran	Sweet	Cold
Sappan Wood	Caesalpinia sappan	Su mu(蘇木)	Soboku	Sweet, salty, pungent	Mild (Natural)
Saussurea Root powder	Saussurea lappa	Mu xiang fen(木香粉)	Mokko matsu	Pungent, bitter	Warm
Saussurea Root(Aucklandia Root)	Saussurea lappa	Mu xiang(木香)	Mokko	Pungent, bitter	Warm
Schisandra Fruit (Chinese Monkshood)	Schisandra chinensis	Wu mei zi(五味子)	Gomishi	Sour	Warm
Scutellaria Root	Scutellaria baicalensis	Huang qin(黄芩)	Ogon	Bitter	Cold
Scutellaria Root powder	Scutellaria baicalensis	Huang qin fen(黄芩粉)	Ogon matsu	Bitter	Cold
Senega Root	Polygala senega or var. latifolia	※2	Senega	Sweet, slightly bitter	
Senega Root powder	Polygala senega or var. latifolia	None in China	Senega matsu	Sweet, slightly bitter	
Senna Leaf	Cassia acutifolia and C. anngustifolia	Fan xie ye(番瀉葉)	Senna	Sweet, bitter	Extremely cold
Senna Leaf powder	Cassia acutifolia and C. anngustifolia	Fan xie ye fen(番瀉葉粉)	Senna matsu	Sweet, bitter	Extremely cold
Sharpleaf Galangal Fruit(Bitter Cardamon)	Alpinia oxyphylla	Yi zhi ren(益知仁)	Yakuchi	Pungent	Warm
Shurb Chastetree Fruit	Vitex rotundifolia or V. trifolia	Man jing zi(万荊子)	Mankeishi	Pungent, bitter	Cool
Siberian Motherwort Herb	Leonurus sibiricus	Yi mu cao(益母草)	Yakumoso	Pungent, bitter	Slightly cold
Smilax Rhizoma	Smilax glabra	Tu Fu ling (土茯苓)	Sankirai	Sweet, tasteless	Mild (Natural)
Smilax Rhizoma powder	Smilax glabra	Tu Fu ling fen(土茯苓粉)	Sankirai matsu	Sweet, tasteless	Mild (Natural)
Smoked Plum	Prunus mume Siebold	Mu mei(烏梅)	Ubai	Sour	Mild (Natural)
Tall Gastrodia Rhizoma	Gastrodia elata	Tian ma(天麻)	Tenma	Sweet	Mild (Natural)
Tall Gastrodia Rhizoma powder	Gastrodia elata	Tian ma fen(天麻粉)	Tenma matsu	Sweet	Mild (Natural)
Tatarian Aster Root	Aster tataricus	Zi yuan(紫苑)	Shion	Bitter, sweet	Slightly warm
Tea Leaf	Cammelia sinensis	Cha ye(茶葉)	Cyayo	Bitter, sweet	Slightly cold
Thinleaf Milkwort Root	Polygala tenuifolia	Yuan zhi(遠志)	Onji	Bitter, sour	Slightly warm
Thinleaf Milkwort Root powder	Polygala tenuifolia powder	Yuan zhi fen(遠志粉)	Onji mastu	Bitter, sour	Slightly warm
Tonkin Sophora Root	Sophora subprostrata	Shan dou gen(山豆根)	Sanzukon	Bitter	Cold
Tortoise Plastron Glue	Tortoise	Gui ban jiao(亀板膠)	Akyo(Kibankyo)	Sweet, slightly sour	Mild (Natural) slightly cold
Trapae Fructus	Trapa japonica	Ling(菱)	Hisinomi	Sweet	Slightly cold
Tree Peony Bark	Paeonia suffruticosa	Mu dan pi(牡丹皮)	Botanpi	Bitter, pungent	Slightly cold
Tree Peony Bark powder	Paeonia suffruticosa	Mu dan pi fen(牡丹皮粉)	Botanpi matsu	Bitter, pungent	Slightly cold
Trichosanthes Root	Trichosanthes kirilowii	Tian hua fen(天花粉)	Karokon	Bitter, slightly sweet, sour	Cold
Trichosanthes Semen	Trichosanthes kirilowii	Gua lou ren(栝楼仁)	Karonin	Sweet	Cold
Tuber Fleeceflower Root	Polygonum multiflorum	He shou wu(何首烏)	Kasyuu	Bitter, sweet, astringent	Slightly warm
Tuckahoe(Poria Sclerotium)	Poria cocos	Fu ling(茯苓)	Bukuryo	Sweet	Mild (Natural)
Tuckahoe(Poria Sclerotium) powder	Poria cocos	Fu ling fen(茯苓粉)	Bukuryo matsu	Sweet	Mild (Natural)
Turmeric Rhizoma	Curcuma longa	Jiang huang(姜黄)	Ukon	Pungent, bitter	Warm
Turmeric Root-tuber	Curcuma longa	Yu jin(鬱金)	Senngyokukin※3	Pungent, bitter	Cold
Twotooth Achyranthes Root	Achyranthes bidentata	Niu xi (牛膝:川牛膝)	Goshitsu	Bitter, sour	Mild (Natural)
uva-urusi leaves	Arctostaphylos uva-ursi	Europian herb. No Chinese	Uwaurusi	Slightly	
Valerian Root	Valeriana fauriei	Xie cao(纈草)※1	Kanokoso	Pungent, bitter	Warm
Valerian Root powder	Valeriana fauriei	Xia cao fen(纈草粉)	Kanokoso matsu	Pungent, bitter	Warm
Wheat Fruit	Triticum aestivum	Xiao mai(小麦)	Shobaku	Sweet	Slightly cold
White Peony Root	Peonia lactiflora	Bai shao(白芍)	Shakuyaku	Sour, bitter	Slightly cold
White Peony Root powder	Peonia lactiflora	Bai shao fen(白芍粉)	Shakuyaku matsu	Sour, bitter	Slightly cold
Wild Mint	Mentha arvensis var. piperascens	Bo he(薄荷)	Hakka	Pungent	Cool
Wrinkled Gianthyssop Herb	Pogostemon cablin	Hou xiang(藿香)	Kakkou	Sour	Slightly warm
Yanhusuo	Corydalis turtschaninovii Besser forma yanhusuo	Yan hu suo(延胡索)	Engosaku	Pungent, bitter	Warm
Younger Immature Bitter Orange	Citrus aurantium	Zhi shi(枳実)	Kijitsu	Bitter, pungent	Slightly cold
Zanthoxylum Fruit	Zanthoxylum piperitum	Shan jiao(山椒)	Sansyo	Pungent	Hot,Slightly poisonous
Zanthoxylum Fruit powder	Zanthoxylum piperitum	Shan jiao fen(山椒粉)	Sansyo matsu	Pungent	Hot,Slightly poisonous
Zedoary	Curcuma kwangsiensis	E zhu(莪朮)	Gajutsu	Pungent, bitter	Warm
Zedoarypowder	Curcuma kwangsiensis	E zhu fen(莪朮粉)	Gajutsu matsu	Pungent, bitter	Warm
Zhejiang Tendrilleaf Fritillary Bulb	Fritillaria verticillata var. thubergii	Zhe bei mu(浙貝母)	Baimo	Bitter, sweet	Slightly cold
Zizyphus Seed	Zizyphus jujuba	Suan zao ren(酸棗仁)	Sansonin	Sweet, sour	Mild (Natural)

References: Chinese Herbal Medicine
Japanese Pharmacopoeia X, IV

※1 Xie cao (纈草): V.officinalis ※2 not use in China ※3 not in Medical Insurance

Societies for Kampo Medicine

Kampo Medicine was a de jure medicine until the Meiji-Restoration in 1886. During this period, scholars did not take the initiative to develop an academic society. Long after the Meiji Restpration the government decided to authorize German medicine as a formal medicine. Doctors who were practicing Kampo medicine reacted to the government and as a consequence developed a number of political associations which attempted academic actions resulting in Kampo medicine becoming a social outcast. In the true sense of the word, the first society of Kampo medicine came into existence in the 1930's.

At that time, there were few doctors, pharmacologists and acupuncturists who gathered to form societies for the study of Kampo Medicine, but rather took action individually. Eventually, they took counsel together and established the Japanese Society of Kampo Medicine" and published the official journal *Kampo and Chinese Herbs*. This was the first society of Kampo medicine in Japan.

After the Second World War, this society could not continue because Japanese society as a whole experienced significant change. However, when postwar adjustments were finished, people who established the previous society, re-established the Japanese Society of Oriental Medicine in 1950. This society continues today and plays an important role in Kampo medicine in Japan.

Associations which play an active part in Kampo Medicine today are:

1. Japanese Society of Oriental Medicine

This society represents Japanese Kampo medicine and is the most authoritative in Japan. It was established to broaden communication among practitioners and to foster cooperation among researchers. Its primary goal was to advance Kampo medicine in 1950 by medical doctors, pharmacologists, and acupuncturists who were practicing this medicine. Its sphere of activity comprehends Kampo Medicine, acupuncture and most areas of Kampo Medicine.

Present actions are:

Major activities

(1) To hold a congress and academic meetings and publish the official journal and other publications,
(2) To authorize a specialist of Kampo medicine,
(3) To investigate and research Oriental medicine,
(4) To interchange and cooperate with facilities at home and abroad, and
(5) Other activities to achieve the above-mentioned purpose.

Present state of activities

(1) Publishing of its official journal, *Kampo Medicine*

Published 6 times a year, plus a special issue for the annual academic congress. The journal reached number 225 (Vol.54 No.2) as of March 2003.

Authors must be a member of the society in principle and access not only the Japanese, but also the English literature.

(2) Holding an academic congress

Holding one general congress each year, sectional meetings at the 8 branches, prefectural meetings and lecture meetings for authorized doctors, totaling 70 meetings per year.

(3) Authorizing a specialist in Kampo Medicine

Since 1989, this system is used to generate a council of authorized doctors. Such authorization by the society requires:

- Have a national license of medicine, be a member of the society over 5 years, take designated credits.
- Turn in case reports and to pass a written and an oral certification examination which is hold once a year.
- Renewal term:every 5 years
- Number of authorized doctors: 3,487 person

(4) Numbers of members as of March 2003.

Full members: 8,247
Supporting members: 367
Total: 8,614
(Breakdown of full members:medical doctors 6,998, dentists 41, pharmacologists 873, acupuncturists 323, other scholars 12)

(5) Committees

The society conducts its activities mainly through permanent and special committees. Current committees are:

i. Committee for editing and publishing official journal - *Kampo Medicine*
ii. Committee for editing and publishing the English version of *Kampo Medicine*
iii. Committee for science and education
To conduct various educational seminars and to edit textbooks
iv. Committee for public relations
To interact and cooperate with facilities at home and abroad
v. Committee for health insurance
Management of health insurance issues about Chinese herbs and traditional prescriptions
vi. Committee for health insurance
To take measures to advance national policies for health insurance
vii. Committee for planning and management
To advance the image of the society and to make inquiries for the board of directors.
viii. Committee for the system of authorized doctors
To examine and authorize doctors of Kampo medicine.
ix. Committee for investigation of medical plants for Kampo prescriptions
To investigate and research medical plants for Kampo prescriptions and folk medicine.
x. Committee for indications of Acupoints
To research acupoints from a historical point of view, the development of acupuncture and educational programs
xi. Committee for technical terms
To publish the glossary of "Kampo Medicine" and it's translation to English.
xii. Special committee for EBM
To investigate the EBM in Kampo Medicine
xiii Committee for public information
To service and maintain the home-page of the society

2. Medical and Pharmaceutical Society for WAKAN-YAKU

The Wakan Yaku symposium (1967-1983) focused mainly on research into Wakan Yaku (the crude drugs serving as material for the preparation of Kampo medicines) was the parent organization for the establishment of this society in 1984. The society holds one annual national conference. While the Japan Society for Oriental Medicine primarily publishes clinical research results, publications pertaining to crude drugs, preparations and basic research are the primary focus in this society.

The society also publishes its own official organ, the "Journal of the Wakan-Yaku Society".
This society has the following purposes.

(1) Meeting and exchanging information among pharmaceutical researchers, physicians and pharmacists regarding various forms of research into Wakan Yaku.

(2) Gathering of colleagues studying the various systems of Kampo medicine and traditional medicine and exchange of relevant information.

(3) Attempts to fuse science based on reductionism and the concepts of "complex systems, diverse systems" dealt with in traditional medicine.

(4) Establishment of new therapeutics and providing the obtained knowledge for the general population.

Since 2002 the "central curriculum of medical education" in medical facilities has been initiated. It includes the item "ability to explain Wakan Yaku", so that this society too is actively pursuing the integration of this concept.

3. The association of east-Asian medicine

In 1938 the leaders in Kampo medicine at the time convened and decided to promote an exchange between East Asian medicine in general and TCM. It established the Association of East-Asian Medicine for the prosperity of this form of medicine, supporting the activities of the Japanese Kampo Medical Society as a by-product of their program. After World War II, during a period of confusion, the association remained dormant for a period, but resumed its activities in 1954 that continue to the present day. Whereas the highest priority of The Japan Society for Oriental Medicine is academic research, the Association of East-Asian Medicine deals with the transmission of traditions, using traditional methods for its research. The Association maintains a mutually supporting relationship with The Japan Society for Oriental Medicine. The official organ of the association, "Clinical Kampo", is published as vertical print and thereby preserves the ancient form of traditional medicine comparatively well.

In the past, its official publication represented the main activity of this association, but in 1991 at the academic general meeting, "Kampo Medicine Research" was established and henceforth published many excellent, strongly traditionally inclined research results.

Currently, the association has about 1,600 members, comprising mainly physicians, pharmacists and acupuncturists, and is engaged in the following main activities.

(1) Publication of the association's official organ "Kampo Medicine Research".

(2) Study groups, lectures, other activities considered necessary for the promotion of traditional medicine.

(3) Commendations of Kampo researchers

(4) Exchange with related domestic and foreign organizations.

4. Japan Society of Medical History

This academic society was founded in 1927 for "research into and spread of medical history research".

It holds one general conference annually. In addition, there are several regional meetings with comparatively few attendants, but a high level of activity. The society publishes the official organ "Journal of Japanese Medical History". Members of this academic society include a variety of researchers regardless of whether they specialize in western or oriental medical history, many of whom actually specialize in the history of Kampo medicine or acupuncture and moxibustion. Many researchers of Chinese medical history, live in Japan, but in comparison to Chinese researchers these researchers publish a great deal of elaborate work characterized by unique points of view. This is particularly true for the field of acupuncture and moxibustion.
This academic society has the following purposes.

(1) Organization of academic conferences, lectures and academic exhibitions.

(2) Publication of the official organ "Journal of Japanese Medical History", "Newsletter of the Japan Society for Medical History" and related books.

(3) Maintaining an exchange with related domestic and foreign organizations as a representative of the academic world of Japanese medical history.

(4) Conducting activities in order to achieve the above-mentioned goals.

Education for Kampo Medicine

Oriental medicine was a traditional form of medicine which supported Japanese health since the 5th century A.D. After the Meiji Restoration in 1868, however, Western medicine became the field of medicine that was taught at schools, and the entire medical affairs system was established and operated based on Western medicine. Accordingly, for more than 100 years Oriental medicine was hardly ever taught at medical schools. Oriental medicine was only practiced by a small number of physicians who studied medicine on their own after graduating from medical school, and by pharmacists who handled herbal medicine which remained in use. Pharmacologists who specialized in the study of herbal medicine and pharmacology helped them from the sidelines. But with very few educational opportunities available, they were supported only by a small number of private research groups. In many instances, education was provided from teacher to student, or that is to say, from one individual to another.

1. Undergraduate Education at Medical Schools

Now that Chinese herbal medicine used for medicinal purposes is covered by public healthcare insurance, the situation has changed – and many medical schools have started to teach Kampo Medicine. The first medical school to offer courses in Kampo Medicine was Toyama Medical and Pharmaceutical University, followed by Tokyo Women's Medical College. With other medical schools subsequently considering the need to teach Kampo Medicine, these schools now teach it to their students through a variety of different programs.

In April 2003, the Ministry of Health, Labor and Welfare made it a requirement for medical schools to include Kampo Medicine in their core curriculum. Professor Katsutoshi Terasawa, who has been involved in this matter since the beginning and who has worked hard for the establishment of this requirement, has instituted the study of Kampo Medicine in the core curriculum as follows.

TABLE 1 Plan for Model Core Curriculum at Toyama Medical and Pharmaceutical University	
E.	**Basics of Clinical Practice**
2.	**Knowledge of Basic Medical Treatment**
(1)	Treatment with Japanese Kampo Medicine
	General Goals
1.	Study of the basics required for an application of Japanese Kampo medicine within clinical practice (basic concepts of Kampo medicine, diagnostics, use of individual prescriptions).
2.	Development of a holistic perspective, acquisition of the ability to select the optimal therapy for any given patient, including the use of Japanese Kampo medicine.
	Achievement Goals
1.	Acquisition of the ability to explain characteristics and basic concepts of Kampo medicine (functions of qi, blood, water; comprehension of the conceptual pairs deficiency - excess, superficial - deep, hot - cold)
2.	Ability to explain the basic differences between Kampo and Western medicine.
3.	Ability to explain Kampo medical diagnostics (comprehension of the four diagnosis methods: observation, listening and smelling, patient questioning and palpation).
4.	Ability to explain the Kampo concept of "Sho (pattern) " (comprehension of pattern orientated therapy).
5.	Ability to explain the composition of Kampo preparations, pharmacologic actions and their indications.
6.	Ability to explain representative side effects of Kampo preparations and relevant precautions.
7.	Ability to explain EBM in relation to Kampo medicine and integration with western medicine.

Table 1: Proposed Model Core Curriculum at Toyama Medical and Pharmaceutical University

According to a survey conducted by Nikkei Medical magazine in February 2004, 79 of the 80 medical schools in Japan now teach Kampo Medicine. Those schools offer lectures on the subject, specially arranged to meet their individual needs.

An example of this is the enhanced educational program at Toyama Medical and Pharmaceutical University, as follows:

TABLE 2 Syllabus of Medical Treatment and Japanese Kampo Medicine at Toyama Medical and Pharmaceutical University for pre-graduation in 2002		
2nd Year	Introduction of Japanese Kampo Medicine History Medical and Pharmaceutical Science	30 hours 30 hours
4th Year	Medical Treatment and Japanese Kampo Medicine	30 hours
5th Year	Japanese Kampo Medicine, Coursework of Clinical Applications	5 hours
5th and 6th Year	Clinical Training of Japanese Kampo Medicine	31 hours (5 days)

Table 2: Syllabus of "Medical Treatment and Japanese Kampo Medicine" at Toyama Medical and Pharmaceutical University

No.	Subject of Study	Content of Learning
1	The role of Kampo Medicine in modern western medical care - Five viscera concept	Comprehension of the characteristics of western and Kampo Medicine as well as the five viscera concept.
2	Qi -Blood-Fluid concept, Qi deficiency, Qi stagnation, Qi reversal	Regarding preparations for the main symptoms of Qi deficiency, Qi stagnation, Qi reversal conditions according to the Qi -Blood-Fluid concept
3	Qi deficiency, Oketsu, Fluid stagnation	Comprehension of preparations for the main symptoms of Qi deficiency, Oketsu, Fluid stagnation.
4	Yin-yang, deficiency-excess, cold-heat and exterior-interior concept	Recognition and comprehension of the individual yin-yang, deficiency-excess, cold-heat and exterior-interior disease states.
5	Six-channel diseases (greater yang, brighter yang, lesser yang, greater yin, lesser yin or reverting yin)	Comprehension of the concept and the disease stages of and preparations for the main symptoms of six-channel diseases.
6	Composition of preparations	Comprehension of the composition of Kampo medicines
7	Reconciliation of oriental and western medicine - side effects of Kampo medicines	Gain an understanding regarding the reconciliation of oriental and western medicine as well as side effects of Kampo medicines through practical examples.

Table 3: Main Theme of "Medical Treatment and Japanese Kampo Medicine" Lesson at Toyama Medical and Pharmaceutical University

Based on this educational program, the other medical schools have devised and offer curricula that are best geared to their individual needs.

A number of universities and research institutes have devised special curricula by which they hold lectures in Kampo Medicine. For instance, the Japan Institute of TCM has with favorable results been holding a 6-day camp-style seminar for medical students throughout Japan (who feel that the course offered at their own university is not enough).

Mon	8:00～8:30 Reading Circle	8:30～ Orientation	10:00～ Clinical Clerkship (stationary care)	17:30～ Clinical Conference
Tue	8:00～8:30 Reading Circle	9:00～ Clinical Clerkship (ambulatory practice)	Clinical Clerkship (stationary care)	
Wed	8:00～8:30 Reading Circle	9:00～ Clinical Clerkship (ambulatory practice)	Clinical Clerkship (stationary care)	
Thu	8:00～8:30 Reading Circle	9:00～ Clinical Clerkship (ambulatory practice)	13:30～15:30 Professor's Round	16:30～ Abstract Reading
Fri	8:00～8:30 Reading Circle	9:00～ Clinical Clerkship (ambulatory practice)	Clinical Clerkship (stationary care)	16:00～ 17:00 Wrap-up

Table 4: Clinical Training in Japanese Kampo Medical Treatment at Toyama Medical and Pharmaceutical University

	1st Day	2nd Day	3rd Day	4th Day	5th Day	6th Day
9:00		Breakfast	Breakfast	Breakfast	Breakfast	Breakfast
		Kampo pathology②	Kampo dosimetry①	Kampo therapy	Workshop①	Special lecture⑨
10:30		Kampo diagnostics	Kampo dosimetry②	Special lecture④	Workshop②	Special lecture⑪
12:00						Special lecture⑫
13:00	Assembly(14:00)	Lunch	Lunch	Lunch	Lunch	Lunch
14:00	Kampo Medicine around the World	Kampo pharmacology	Special lecture②	Excursion	Special lecture④	Breakup
15:30	Kampo physiology	Special lecture①	Special lecture③		Clinical conference	
17:00	Dinner	Dinner	Dinner	Dinner	Dinner	
19:00	Kampo pathology①	Clinical lectures	Drug practice	Special lecture⑤	Special lecture5	
20:00	Kampo pathology②					
21:00						

Table 5: Japan Institute of TCM's Curriculum for "Kampo Medicine Seminar for Medical Students"

Diagram 1: Texts Used in "Kampo Medicine Seminar for Medical Students"

These texts include an outline of Kampo Medicine, the history of Kampo Medicine, its physiology, etiology and pathology, as well as the study of its diagnosis, drugs, prescriptions and therapeutics.

2. Postgraduate Education and System of Specialized Medicine

Kampo Medicine is taught in a variety of formats at the postgraduate level. This education is conducted in many different forms. There are many independent study groups around Japan, including courses sponsored by the Japan Society for Oriental Medicine, research groups sponsored by pharmaceutical companies, and research groups sponsored by local physician associations around Japan.

The Japan Society for Oriental Medicine, which holds lectures at its various chapters, endeavors to contribute to the continuing education of medical specialists, while local physician associations around Japan periodically hold seminars suited to clinical and everyday purposes. Pharmaceutical companies offer lectures delivered by top speakers in the field, to further improve the use of their products in their endeavors to spread correct and accurate knowledge.

In 1989 the Japan Society for Oriental Medicine introduced a system of specialized medicine. With the emergence of this system, the membership of the Japan Society for Oriental Medicine has doubled. This has resulted in a variety of different studies being conducted at the same time, so that in addition to traditional medical research methods used thus far, there have emerged methods employing Chinese herbal medicine based on Western medical methodology. As a result, Kampo Medicine has entered a new phase, including the development of new medicines to treat specific diseases. And education programs have developed accordingly.

Among the problems in education at the present time are how to teach academic systems of Kampo Medicine which are not necessarily simple, and how to position traditional medicine of Japan from an international perspective.

In order to breathe life into Kampo Medicine on both clinical and everyday levels amid the rapidly progressing field of Western medicine, Chinese herbal medicine must not merely exist as a substitute for Western medicine but rather Kampo Medicine must be understood as a system in its own right. The basis of education exists here. Education in Kampo Medicine in Japan is still in a period of transition.

Journals of Kampo Medicine

Prior to 1890, journals devoted to Kampo medicine, did not exist since the social basis for its existence had not been laid. For the next ten years, individuals who were trying to preserve Kampo medicine and protect it from political influences, developed a number of publications. All were discontinued by 1900.

Following a relatively long period, a number of journals appeared due to the revived interest in Kampo medicine. Among those, *Kampo Medicine and Chinese Herbs*, first published in 1934, provided the most comprehensive content. As a result it took a leadership role in the field of Kampo medicine at that time. It was discontinued in 1944 due to the impact of World War II.

The Japan Society for Oriental Medicine was founded after World War II, and immediately published its journal, *Kampo Medicine.* This was followed with the development of the Association of East-West Medicine with its journal, *Journal of Kampo Medicine.* This journal finally provided researchers in the field an appropriate environment for publishing their research. Various pharmaceutical companies also began to publish their own research journals, as did a number of commercial entities. Many of these continue to prosper today. Below, the reader will find an introduction to the most important journals available at this time in Japan.

Kampo Medicine

Official journal of the Japanese Society for Oriental Medicine. The most authoritative journal in this field. Includes dissertations, theses, case reports, record of lectures about Kampo Medicine, and some articles on acupuncture. Articles written in Japanese with attached English summary. Kampo literature in English is rare. Started in 1949, published 4 times a year,

Journal of the Japan Society of Medical History

Official journal of the Japan Society of Medical History. Carries not only the history of Japanese medicine but also world medicine (approximately 50:50). Includes literature on Kampo medicine and acupuncture. Articles written in Japanese include an English summary. Articles written in English are rare. Published 4 times a year, 21.0×15.0cm. pages 160～200. For members only.

Journal of Traditional Medicine

Official journal of the Medical and Pharmaceutical Society for WAKAN-YAKU. Includes dissertations and theses about most Chinese Herbs and some prominent clinical reports. About a half of the articles are written in English. Papers written in Japanese have attached English summaries. Started in 1983, published 4 times a year.

Clinical Journal of Traditional Chinese Medicine

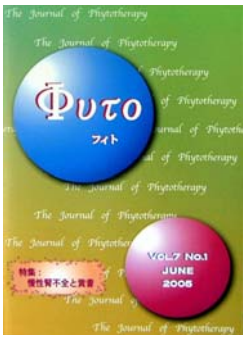
Published to introduce current TCM in China. Carries articles written by authorities in China, theoretical research by Japanese, case reports, explanation of Kampo prescriptions, and latest news from China (for example the therapy of SARS). No English summary. Published 4 times a year.

Journal of Kampo Medicine

Official journal of the Association of East-Asian Medicine. Includes a wide range of articles about this area. Includes dissertations, theses, case reports, record of lectures about Kampo Medicine, acupuncture, medical essays, medical history, tete-a-tete talk, clinical research, round table talk, explanation of Kampo prescriptions, interpretation of classics. The literature of "Kampo Medicine" is rigorously judged and includes many articles from related disciplines. No English summaries. Started in 1954, published 12 times a year, 21.0×15.0cm. Pages 80～100. For members only. Sold in a few specific book stores. Price900Yen.

Journal of Kampo Medicine & Herb

Edited from the standpoint of so called "Japanese Kampo". Carries clinical research reports, case reports, explanation of Kampo prescriptions, round table talk, etc. No English summary. Published 6 times a year.



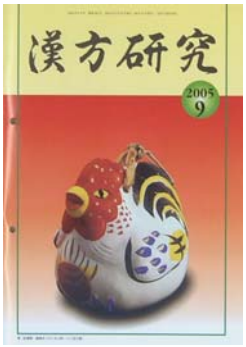
Φ υ τ ο
Published by Nagoya-Byakugokai which is the research circle of Kampo in Nagoya. Applies the epidemiological method and creates the new world in this field. Carries unique articles, for example, case reports, value of Chinese herbs and so on. No English summary. Started in 1998, published 2-3 times a year.

Kampo Igaku
One of the academic journals of Tsumura. Carries fundamental research, clinical research, interview of specialists, round table talk, explanation of Kampo prescriptions, introduction to Kampo clinics, etc. No English summary. Published 6 times a year.

Traditional Medicine
One of the academic journals of Tsumura. Edited from the viewpoint of current TCM in China. Carries case reports, explanation of Kampo prescriptions, latest news from China, interpretation of Theory of TCM, round table talk. No English summary. Published 4 times a year, 26.0×21.0cm, Pages 24～30. Price 980Yen.

Phil Kampo
One of the academic journals of KANEBO, a successor of "THE KAMPO" 1983-2001). Carries tete-a-tete talk, clinical research, round table talk, explanation of Kampo prescriptions. No English summary. Started in 2002, published 4 times a year, Pages 20～24. Price 1000Yen

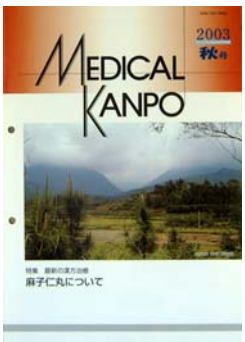
We
One of the academic journals of KANEBO. Enlightening contents. Carries summaries of current clinical research, round table talk. No English summary. Started in 2000, published 4 times a year, A4 size, Pages 20～24. Price 1000Yen



Research Kampo
An academic journal of Kotaro-Kampo. Has the longest history of the journals of Kampo Medicine published by Pharmaceutical company. Carries dissertations, theses, case reports, medical essays, medical history, clinical research, round table talk, explanation of Kampo prescriptions, etc. No English summary. Started in 1949. published 12 times a year, 26.0×18.0cm. Pages 20～24. Price 800Yen.

Wakanyaku
An academic journal of Uchida-Wakannyaku. Because this company is a wholesale dealer of Chinese herbs, this journal has many articles about Chinese herbs. Carries botany, cultivation and harvesting of Chinese herbs, fundamental research for Chinese Herbs, introduction of Chinese Materia Medica and feu clinical research, etc. No English summary. Published 12 times a year, 29.5×21.0cm Pages 16～20.

Tradition & Medicine
An academic journal of Matsuura. Carries dissertations, theses, case reports, medical essays, medical history, clinical research, round table talk, explanation of Kampo prescriptions, etc. No English summary. Published 4 times a year, 29.5×21.0cm Pages 16～20.



Medical Kampo
An academic journal of Osugi. Carries case reports, medical essays, clinical researches, explanation of Kampo prescriptions, etc. No English summary. Published 2 times a year, 29.5×21.0cm Pages 16～20.

Kampo Medicine Research
An academic journal from Tsumura. Carries information for pharmacist engaging prescription of Kampo medicine including instruction on dosage, etc. while more medical institutions are adapting Kampo medicine. Started in 1992, published 6 times a year, A4 size, Pages 20.

Medical Insurance in Japan

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Foreword

The practice of Kampo medicine in Japan is sustained by the country's medical system. The reason that Kampo medicine is so widely used for medical purposes is due to its acceptance by medical insurance. The medical system in Japan is not the same as that in other countries. With a unique Japanese framework, and operated through the political support of the Health, Labor and Welfare Ministry; the Japanese medical system has sustained the health of the Japanese people. When considering the role played by Kampo medicine in Japanese healthcare, it is extremely important to look at how Kampo medicine is managed within the medical system.

As noted in other parts of this journal, the reasons that physicians educated in Western medicine can practice Kampo medicine are (1) drugs used in Kampo medicine can be dispensed easily, and (2) the existence of 148 types of these drugs which have a high level of compliance in their use. After learning a certain degree of traditional medical concepts, physicians introduce these drugs into their own clinical practice. Utilizing these drugs, and the insurance system that sustains their operation, they perform clinical tests and independent research, including research based on the accumulation of case studies and comparative studies.

Meanwhile, there are medical institutions, though not many, which provide medical treatment based on Kampo medicine, at their own expense. In particular, there are many places that use herbal medicine as therapeutic drugs. While more than 160 types of herbal medicine are accepted by healthcare insurance, it is financially difficult for herbal medicine to be used with health insurance treatment. This is due to such problems as their excessively low cost, the fact that they require a great deal of manpower and shelf space, and the difficulty in securing pharmacists who posses a high degree of knowledge in this area. While providing medical treatment at one's own expense is much simpler than providing health insurance treatment, it is another form of Kampo medicine practiced in Japan.

This article, written by Ono, explains the medical system in Japan. The overall theme is much larger than Kampo medicine, and has very little to do with clinical Kampo medicine. Nevertheless, we have included it to let readers know that medical treatment is based on this system. This article also contains information that will be useful to people who intend to study about the Japanese medical system.

Editorial Staff

1. History of Development of the Medical System

(1) Medical Security System and Social Security

Broadly defined, Social Security in Japan includes protection and pensions for victims of war. Narrowly defined, it means public assistance (livelihood assistance), social welfare (for the physically disabled, mentally disabled, elderly, children, single mothers, etc.), social insurance (medical insurance, annuity insurance, nursing insurance, unemployment insurance, industrial injury insurance, etc.) and public health (tuberculosis, infectious disease, drug-related measures, waterworks and drainage, waste management, etc.). Other than exceptional cases such as people who receive livelihood assistance based on low income (0.8% of the total Japanese population), all Japanese citizens currently have a form of medical insurance, which is one of the medical services guaranteed to all Japanese citizens.

(2) History of the Medical Security System

① Structure of Universal Health Insurance System

The history of medical insurance in Japan dates back to the establishment of the Health Insurance Law in 1922. This law became institutionalized for employees at factories and elsewhere, amid the rise of the labor movement during the development period of capitalism at the beginning of the 20th century. Subsequently, in 1938, the system of national health insurance was established for individual proprietors and farmers. As a result, in 1945 approximately 60% of the Japanese population had medical insurance.

However, with the chaos of World War II, it became impossible to provide sufficient healthcare to people, and the system was in danger of collapsing. With the economic and social reconstruction after the war, the construction of a genuine system of social security began. And the system of medical insurance, which had been on the brink of collapse, was also reconstructed.

The national treasury assumed the burden of government-managed health insurance in 1954. In 1963 a 3-year period of health insurance provision which had been in place thus far was abolished, the time limitation on insurance during recuperation was eliminated, and plans to improve health insurance were discussed.

Meanwhile, based on revisions in 1954, the management of national health insurance was revamped from the regular Blue Cross system conducted by individual cities, towns and villages, to public management by municipalities. In addition, it became compulsive for municipalities managing national medical insurance to make this insurance available to residents. In order to stabilize the finances of national health insurance, based on revisions in 1955, a system of national treasury assistance equivalent to 20% of recuperation expenses became law.

Under such conditions, the National Health Insurance Law was completely revised in 1958, and a yearly plan was decided for the realization of universal health insurance over a period of four years. In 1961, a system of national health insurance was put into effect in all municipalities for individual proprietors and farmers who did not have employee's health insurance. The result was universal health insurance in Japan, based on employee's health insurance and national health insurance. After that, it became compulsive for all Japanese citizens to have either employee's health insurance or national health insurance – both of which are forms of social insurance.

② Establishment of Healthcare System for the Retired

It is a qualification requirement that people receiving employee's health insurance in Japan be employed at a place of business enumerated in the law. After an employee retires because he or she has reached retirement age or for another reason, that employee is no longer employed at the place of business, and as a general rule will no longer receive employee's health insurance – but instead will receive national health insurance.

The level of health insurance for such aged retirees drops at a time when their need for healthcare is on the rise, resulting in the problem whereby they must depend on the national treasury and national health insurance premiums to pay their healthcare expenses. For this reason, a medical care system for the retired was established in 1984 to ensure fairness in the provision of healthcare and the burden of its costs throughout the lifetime of people who receive employee's health insurance, and to correct irrationality between medical care systems. While the rate increases at which healthcare is provided to aged retirees who formerly had employee's health insurance but who have since begun receiving national health insurance, this system pays for that healthcare by the insurance premiums from retirees who had been receiving employee's health insurance and by contributions from employee's insurance.

③ Establishment of Health Insurance System for the Elderly

As mentioned above, due to the relationship between employee's insurance and National Health Insurance, the percentage of elderly people who have National Health Insurance increases as society ages. Furthermore, as the structure of employment in Japanese society changes from primary industry to secondary industry, and from secondary industry to tertiary industry, the younger segment of society switches to employee's insurance rather than National Health Insurance. As a result, the age composition of insurants with National Health Insurance has gradually risen. In 1998, the average age of people with an insurance policy was 51.3 years for National Health Insurance through municipalities, 36.9 years for government-managed health insurance, and 33.6 years for union-managed health insurance. The percentage breakdown for elderly people with health insurance is 25.3% for National Health Insurance through municipalities, 5.7% for government-managed health insurance and 2.8% union-managed for health insurance.

If the situation by which the age composition of insurants is made light of is projected into insurance area of finance, if there were no system of adjustment between types of coverage, the higher the age composition in a system of insurance the more difficult it becomes to finance that system. And overall the insurance premium revenue obtained from elderly people is not as large as that obtained from the younger segment. Meanwhile, as far as expenses are concerned, since the per-person healthcare costs for the elderly is five times that of the younger segment, as the percentage of elderly people increases so increase healthcare costs. (As a result, in 1999, healthcare costs for the elderly accounted for 38%, or 11.8 trillion yen, of the total of 30.9 trillion yen in national healthcare costs. What's more, the percentage of healthcare costs for the elderly increases each year.)

Also, in 1973, based on revisions in the Elderly Welfare Law, a system was established whereby so-called free healthcare costs for the elderly (the amount for which the individual elderly person is responsible under healthcare insurance), are paid for at public expense. With the subsequent rapid increase

in healthcare costs for the elderly, there has been more pressure for the financing of National Health Insurance.

For this reason, the difference in age composition among insurers that comes with the aging of society has been corrected – and from the viewpoint of spreading the burden of healthcare costs for the elderly fairly among the Japanese people a health service system for the elderly was established in 1983.

Also, health and medical treatment measures provide for the treatment of disease – and based on the knowledge that comprehensive measures for the health of the elderly have been lacking, not only does the health service system for the elderly deal with problems of finance, but it also has to do with comprehensive insurance for the elderly, which includes measures for preventing and detecting disease early on, during the prime of life, so that the increasing number of elderly people can live healthy lives.

④ Establishment of a System of Nursing Insurance

As society ages there has been a sudden increase in the number of people who require nurses, including those who are bedridden and those who suffer from dementia. Meanwhile, changes in social conditions, including the growing number of nuclear families and the social advancement of women, have witnessed a decrease in the function of nursing provided by families.

However, since nursing service for the elderly was formerly provided under two different types of coverage – welfare coverage for the elderly and insurance coverage for the elderly – there was a disproportion in the burden of cost and usage procedure, so that the situation was inadequate for comprehensive nursing measures. For this reason, so that elderly people who require nursing or care will be able to lead meaningful lives in accordance with their own ability, a system of nursing insurance coverage was established in April 2004, to provide comprehensive service, including insurance, healthcare and welfare services, based on user selection.

⑤ Maintenance of the System for Healthcare Provision

The modern healthcare system in Japan began in 1874 with the establishment of the medical system. The National Healthcare Law was subsequently established in 1942, and with the difference between hospitals and clinics being clarified, a system for permitting physicians to establish clinics was put into effect.

After the war, in 1948, the Healthcare Law, on which the system for healthcare provision in Japan is based, was established. Also, with the Doctor and Dental Practitioner Law being gradually put into place, there has been a quantitative expansion of healthcare provision for acute medical treatment.

Subsequently, with changes in the structure of disease and the aging of society, there has been a review of the system of healthcare provision.

In 1985, a healthcare planning system by prefecture was introduced for the purposes of revising the system of healthcare provision locally as part of the first round of revisions of the Healthcare Law, and obtaining the cooperation of healthcare facilities. Also, an adequate number of hospital beds have been realized.

In 1992, the Healthcare Law was revised a second time for the purposes of (1) realizing conceptual regulations for providing healthcare, and (2) the systemizing the function of medical facilities with technologically advanced hospitals and extended care units having been systematized.

Furthermore, when the Healthcare Law was revised for a third time in 1997, (1) informed consent regulations were realized, (2) extended care units were expanded into clinics, (3) community health support hospitals were systematized, and (4) the system of healthcare planning was reviewed.

When the Healthcare Law was revised for a third time in 2000, (1) a distinction was made between beds for general patients and beds used for the purpose of recuperation, and the provision of healthcare was promoted to suit the condition of the individual patient; (2) there was an easing of required regulations; (3) there was a securing of the observance of hospital arrangement standards; and (4) measures were adopted for easing advertising regulations.

2. Structure of Disease

The structure of disease in Japan has changed from acute infectious disease to chronic lifestyle disease, based on such things as improvement in nourishment, higher hygienic standards, advances in medicine and medical technology, and changes in health awareness. In view of the annual transition in the percentage of cases of hospitalized treatment, there has been a remarkable decrease in infectious and parasitical diseases, with a drastic increase in disease of circulatory organ systems, including cerebrovascular trouble, as well as neoplasm such as cancer. Also, death ratio according to cause of death indicates a sudden decrease in the death rate from

tuberculosis, and an increase in the death rate from cerebrovascular disease and malignant growths.

3. Healthcare Costs

(1) Total Healthcare Costs and Their Breakdown

National healthcare costs in Japan are on an upward trend, even under conditions of slumping economy. Healthcare costs reached 30,933,700 million yen in 1999, or 244,200 yen per person.

This notion of national healthcare costs represents the cost for treating ailments among the Japanese population at medical facilities over a 1-year period. These costs are calculated based on expenditures for public healthcare insurance. Included in national healthcare costs are medical treatment fees, the responsibility of patients to pay for a portion of the costs, the cost of providing medicine, nursing costs, and transportation costs. However, expenses for normal birth, expenses required for medical checkups for the maintenance and promotion of health, expenses for amenity bed, and a portion of the construction costs for public medical institutions are not included. Also, as a general rule, since healthcare costs are free of consumption tax, there are no taxes for their expense. In Japan, the details of medical practice, the administering of medication and medical examinations appear in statements submitted by medical institutions as the foundation of a progress payment system based on a nationally standardized medical treatment fee bill used by both hospitals and clinics. And so, by totaling up the amount paid based on medical fee statements, the particulars and monetary amounts of medical treatment performed at medical facilities are understood on the national level. And based on such social insurance statistics, national healthcare costs are determined with the addition of data other than social insurance, including healthcare costs paid for at public expense.

Including the cost of purchasing medicine, public health expenses (including medical checkups and vaccinations), managerial and operational costs, and research and development costs, this corresponds to the total healthcare costs of the OECD. Total healthcare costs in Japan (1998) are 7.4% of the GDP, which ranks number 18 among nations belonging to the OECD. However, in terms of monetary amount, this represents 283,558 million dollars, second only to the 1,125,555 million dollars of the United States. The per-capita healthcare cost is 2,242 dollars for Japan (ninth), with Germany at 2,697 dollars (fifth), France at 2,324 dollars (eighth), and the Netherlands at 2,172 dollars (tenth) – which means that there is not such a big difference in per-capita healthcare cost among these nations.

Looking at the breakdown of healthcare costs in Japan in terms of national healthcare costs (fiscal 1999) by consultation type, general consultation costs involving admittance to the hospital account for 36.8%, dental clinics account for 8.2%, dispensing pharmacies account for 7.8%, costs for meals and medical preparations when patients are admitted to the hospital account for 3.5%, health service facilities for the recuperation of the elderly account for 2.5%, and home nursing and medical costs for the elderly account for 0.3%.

Breaking things down by category of expense at medical institutions (fiscal 1998), personnel costs involving healthcare attendants account for 50.9%, the cost of medical supplies accounts for 19.4%, the cost of medical materials accounts for 6.1%, and consignment expenses account for 5.2%. By fiscal resources (fiscal 1999), public expenses account for 32.9%, the cost of insurance premiums accounts for 52.5%, with other costs accounting for 14.7%.

(2) Healthcare Costs for the Elderly

Healthcare costs for people of the age of 70 and older (including bedridden people between the ages of 65 and 70) (hereinafter referred to as "healthcare costs for the elderly") reached 11,804 billion yen in fiscal 1999. The trend for increasing healthcare costs for the elderly is remarkable, with these costs accounting for 38% of total national healthcare costs.

Breaking down national healthcare costs by main causes for this increase, increase in population accounted for 0.2% of the 3.7% increase in fiscal 1999, the aging population (change in the population composition by age level) accounted for 1.6%, with other increases (change in the structure of disease, advances in healthcare, etc.) accounting for 1.9% of the total increase – which means that the effect of aging is great. Also, while the total cost of national healthcare increased by 3.7%, the increase in healthcare costs for young people was 1.0%, with the increase in healthcare costs for the elderly at 8.4%.

The reasons that the cost of healthcare for the elderly causes healthcare costs to increase are because of the increase in the population of elderly people, and because of the fact that per-capita healthcare costs for the elderly are five times greater than the costs of healthcare for young people. When comparing the difference between healthcare costs for the young and old in Japan to that in American and European countries based on data from the OECD, the difference in Germany is 2.68 times (1994) and the difference in France is 3.00 times (1993), so that the difference between the young and old is generally between 2 and 4 times – which means that this difference is higher in

Japan than in Western countries. In Japan consideration must be given to the fact that the costs of nursing have traditionally been calculated as healthcare costs, due to so-called "social hospitalization," whereby people are hospitalized at medical institutions due to such factors as outdated nursing services provided to the elderly, although medical treatment might not be necessary.

The cause of high healthcare costs for the elderly has to do with each of the three elements of healthcare cost per capita. Among the three elements, the "consultation rate" is an index indicating how often a person with healthcare insurance is seen at a medical institution per month. In this case, the number of instances of consultation is the same as the number of bills for medical treatment issued by medical institutions, with one bill per patient issued by each medical institution. The consultation rate for the elderly is 6.2 times that of young people for patients who are hospitalized, and 2.6 times that of young people for outpatients.

The next element, "number of days per instance," is the average of the actual number of days of consultation per month as indicated in the consultation fee statements from medical institutions. The number of days per instance for elderly people is 1.3 times greater than that number for young people who are hospitalized, and 1.4 times greater than that number for young people who are outpatients.

The "per-day consultation cost," which is the consultation cost (billed to the medical insurance each month) divided by the actual number of days of diagnosis and treatment, means the unit price of healthcare service. This per-day consultation cost for the elderly is 0.9 times greater than that for young people who are hospitalized, which means that it is less for the elderly than for the young. The per-day consultation cost for outpatients is 1.2 times greater for the elderly than it is for young people.

As indicated above, the reason that the cost of healthcare for the elderly is higher than it is for young people is due to the fact that the consultation rate for the elderly is much higher than it is for young people, both for patients who are hospitalized and for outpatients. Amid this situation it is surmised that elderly people, who have numerous adult lifestyle diseases such as diabetes and high blood pressure, frequently consult physicians at medical institutions. Furthermore, with the free access in the Japanese healthcare system which enables patients to choose the medical institution where he or she will consult a physician, it is believed that other reasons include the fact that there is a smaller percentage of elderly people who take the responsibility of healthcare costs upon themselves, and the fact that the excessive number of hospital beds and outdated nursing services promote so-called social hospitalization.

Of course, the average life expectancy in Japan is 77 years for men and 84 years for women, both of which are the highest in the world. With the average healthy life for men and women in Japan at 74.5 years, the WHO, both in quality and equality, ranks the Japanese insurance and healthcare systems number one in the world. However, with the further advance of aging in the future, it is estimated that national healthcare costs will reach 81 trillion yen in 2025, 45 trillion yen, or 56%, of which will be accounted for by healthcare costs for the elderly. These national healthcare costs account for 12.5% of the national income, for an increase of approximately 1.7 times that of the 7.5% figure for 2000.

Before there is a sudden rise of healthcare costs for the elderly, it is important for Japan to establish measures for the prevention of disease and general healthcare, keeping in mind the matter of lifestyle disease. In addition, Japan faces the urgent task of reforming the system of healthcare for the elderly.

4. System for Providing Healthcare

(1) Amnesty for the System of Providing Healthcare in Japan

The system for providing healthcare in Japan has the following nine features. (1) There is a system in place by which physicians and dentists are free to establish clinics if they notify the prefectural governor of that establishment. (2) Hospital doctors are working doctors. (3) There are no restrictions on consultation fees. (4) There is a high percentage (approximately 80% of the number of facilities) of private hospitals (medical corporations); there is a high percentage of small and mid-sized hospitals with 200 beds or less (approximately 70% of the number of facilities). (5) Some clinics have beds, and clinics are equipped with medical equipment and facilities. (6) Hospitals take outpatients, and the consultation rate for those patients is high. (7) It is prohibited for hospitals or clinics to operate for profit. (8) People are free to choose the medical institution where they will consult a physician. (9) On the average, patients in Japan remain hospitalized for more days than patients in many of the other countries belonging to the OECD; Japanese hospitals have more beds per patient than many of the other countries belonging to the OECD; Japanese hospitals have a fewer number of physicians and nurses on staff per bed than many of the other countries belonging to the OECD.

(2) Medical Facilities

Broadly speaking, medical facilities can be divided into three categories: hospitals, clinics and maternity clinics.

Hospitals are medical facilities that have at least twenty beds, and must receive permission from the prefectural governor to be established.

Some hospitals, known as "technologically advanced hospitals," provide advanced healthcare, and based on an application submitted by the individual hospital are individually approved by the Ministry of Health, Labor and Welfare to perform development, evaluation and training in advanced healthcare. Specifically speaking, these include university hospitals and national cancer centers, with 82 such facilities having been approved as of April 2002.

Also, from the viewpoint that family doctors and dentists should be supported in order to ensure healthcare in local regions, there exists a system of "hospitals supporting local healthcare," approved by the prefectural governor. As a condition for being approved, hospitals supporting local healthcare must provide healthcare to referred patients, provide support to local healthcare facilities by such means as the joint-utilization of facilities and equipment and making facilities and equipment openly available, provide emergency medical care, and train healthcare attendants in the local region. As of April 2002, there were 35 facilities that had been so approved.

Clinics either are medical facilities that have no beds at all or have hospitalization facilities of 19 beds or less. If a physician or a dentist opens a clinic, he or she must notify the prefectural governor (the mayor of the city or special district where the public health center is set up). If a person other than a physician or a dentist opens the clinic, he or she must receive permission from the prefectural governor (the mayor of the city or special district where the public health center is set up).

Maternity clinics are medical facilities that either have no beds at all or have hospitalization facilities of 9 beds or less, and where midwives work. If a midwife opens a clinic, she must notify the prefectural governor (the mayor of the city or special district where the public health center is set up). If a person other than a midwife opens a clinic, that person must receive permission from the prefectural governor (the mayor of the city or special district where the public health center is set up). The prefectural governor must grant permission to a facility that so applies if its structural equipment and stationed personnel conform to a certain standard. However, the prefectural governor might not grant permission for the establishment of such a facility if the person applying for permission intends to operate that facility for profit.

(3) Healthcare Attendants

The number of doctors and dentists in Japan is on an upward trend each year, and as of 2000 there were 255,792 doctors and 90,857 dentists. While this is less per capita than those numbers for other advanced nations, Japan achieved the target of having "150 doctors and 50 dentists per 100,000 people by 1985," which was set in 1970. In order to ease the excessive number of personnel in the future, the university admission capacity has been decreased.

And in efforts to improve quality and raise the level of clinical ability, clinical training for graduates was systemized and enhanced.

The number of nursing personnel per capita in Japan is on the same level as that in other advanced nations, but the number of nurses per hospital bed remains low. According to the forecast regarding recipients of nursing services in December 2000, demand at the end of 2001 will exceed supply by approximately 35,000 people due to such factors as the realization of a more cordial system of nursing, improvements in working conditions, and the carrying into effect of a system of nursing insurance coverage. However, it is forecasted that supply and demand will balance out at about 1,300,000 people by 2005.

There are two types of nurses. One is the so-called associate nurse, who receives a license after passing a test offered by the prefectural governor. The other is the regular nurse, who receives a license after passing a test offered by the minister of health, labor and welfare. The former changing to the latter and the improvement of quality have become issues.

(4) Healthcare Corporations

According to the Healthcare Law, a hospital, or a clinic where doctors and/or dentists work, or a corporation or foundation that intends to establish a health service facility for the elderly may make that facility into a healthcare corporation. The approval of the prefectural governor (or the minister of health labor and welfare, for two or more businesses) is required to establish a healthcare corporation. As conditions for approval to establish a hospital, the establisher must have a capital adequacy ratio of 20% or more, and there must be three directors, one inspector, and as a general rule the chief director must be a doctor or a dentist.

A healthcare corporation is prohibited from having a dividend of surplus, and any contingent business is

limited to being within the scope of the training of healthcare practitioners. What's more, as a general rule business for profit is prohibited.

Healthcare corporations are subject to the following taxes: corporation tax (the same tax rate as a joint stock company) and enterprise tax (anything having to do with social health insurance treatment rewards is tax-free, and tax rate reductions apply to anything having to do with diagnosis and treatment chosen at the discretion of the patient).

Included among healthcare corporations are "specified healthcare corporations" which, based on the Special Taxations Measures Law, are approved by the minister of finance as a corporation which meets certain conditions, including operating a business which has a high level of public interest, and/or which is publicly managed. Also included among healthcare corporations are "special healthcare corporations" which, based on the Special Taxations Measures Law, are approved by the prefectural governor for meeting the same conditions. Special healthcare corporations receive corporation tax rate reductions. And special healthcare corporations are allowed to operate certain types of business for profit.

(5) Evaluation of Medical Practice

Against a backdrop of increased popular awareness for healthcare and rising concern among affiliates for the quality of healthcare, the Project for the Evaluation of Hospitals by a Third Party was carried into effect in 1997.

Through this evaluation project, the quality of diagnosis and treatment, nursing, and other care provided by a medical institution, patient satisfaction and the situation of management are evaluated by the Japan Council for Quality Health Care, as a third party from a neutral standpoint, based on a request from the hospital. If the results of the evaluation are of a certain standard or above, a certificate of approval is issued to the hospital. Although hospitals are not required to undergo this evaluation, 725 hospitals had received a certificate of approval as of August 2002.
From the viewpoint of improving the quality of healthcare, progress can be expected from the evaluation of medical practice by a third party. But in order to promote this trend hospitals are now allowed to publicize the results of their healthcare evaluation. And through revisions of healthcare fees in 2002, the inclusion of palliative care has become a condition for approval by the Japan Council for Quality Health Care and for ISO certification.

5. Healthcare Insurance Coverage

(1) Classification of Coverage

① Employee's Insurance

A) Beneficiaries and Insurers

Depending on the beneficiaries to whom the coverage applies, types of healthcare insurance are roughly divided into employee's insurance (occupation insurance) for employees and their families, and National Health Insurance (regional insurance) for people engaged in the agriculture and fishing industries and individual proprietors.

And depending on the difference in beneficiaries, employee's insurance is divided into health insurance (union-managed health insurance and government-managed health insurance), seaman's insurance and insurance for the different kinds of mutual aid unions. Health insurance coverage for general employees is the biggest, accounting for approximately 55% of all subscribers. Under the system of health insurance coverage, offices of the national government, corporate offices (including offices), and private offices engaged in certain types of business which regularly employ five or more people are offices of compulsive application, and all employees who work at those offices are compulsion application insurants. Nearly all types of businesses are deemed businesses to which this insurance applies. Classifying health insurance coverage from the point of view of insurers, this insurance can be divided into government-managed health insurance that is managed directly by the government, and union-managed health insurance that is managed by a health insurance union established individually or jointly by the owner or owners of the business.

Union-managed Health Insurance

Health insurance unions are public corporations not affiliated with the government, and are established individually or jointly by the owner or owners of businesses which employee 300 people or more per one or two or more places of business. (Actually an individual union has 700 or more people, while an integrate union has 3,000 or more people – in order to secure its ability to diffuse risk.) Health insurance unions are made up of business owners, employees of places of businesses who have employee's insurance, and people who have arbitrary insurance. Health insurance unions manage the union members who are insured and the heath insurance itself. Since a certain number of subscribers are needed to establish a health insurance union because of the necessity to diffuse risk, union-managed insurance is mainly for people who are insured through large corporations. The number of health insurance unions at the end of March 2001 was 1,756.

Government-managed Health Insurance

The government manages the health insurance of people with insurance that is not managed by a union. Government-managed health insurance is mainly for employees of small and medium-sized businesses who have insurance.

Other Types of Employee's Insurance

The mutual aid union is a system of healthcare insurance coverage that was established for special occupations to serve people with seaman's insurance and civil servants.

People insured under the system of seaman's insurance include captains and crewmembers of vessels which meet certain requirements. This type of insurance, which is managed by the government, accounts for 0.2% of all subscribers (as of the end of March 2000).

Mutual aid unions provide coverage for workers in specific occupations, including civil servants. This coverage is divided according to specific occupation. Currently there are three types of mutual aid unions. These are mutual aid unions for employees of the national government, mutual aid unions for employees of local governments, and mutual aid unions for personnel of private schools. Mutual aid unions account for 7.9% of all subscribers (as of the end of March 2000).

B) Benefits

Details of Benefits

Healthcare insurance is a system of coverage against financial loss, including that resulting from illness, injury, death and birth, and is provided for the purpose of treating ailments. The scope of these insurance benefits is stipulated to include medical examinations, medicine and materials used in medical treatment, medical treatment such as surgery and other procedures, the management of the recuperation of patients at home as well as nursing and other forms of care required for that recuperation, and admittance to a hospital or clinic as well as nursing and other forms of care required for recuperation. There is no time limit involved. Employee's insurance is provided not only to the employee who has the insurance, but also to a specified range of nonworking dependents.

Benefits are broadly divided into healthcare benefits and cash benefits. Healthcare benefits are the healthcare services provided through healthcare insurance. In Japan a person with insurance receives healthcare services at a medical institution designated by the Ministry of Health, Labor and Welfare as an insurance medical institution. As a general rule, that insurant only needs to pay a co-payment, while the rest of the healthcare cost is paid by the insurer to the medical institution as a benefit in kind. When an insurant cannot receive a benefit in kind – for example, in a circumstance when he or she has had no choice but to receive medical treatment overseas – the insurant pays the entire medical bill and is later reimbursed for that amount by the insurer. Cash benefits include cash benefits for sickness and maternity benefit money as compensation for taking off from work, transportation expenses as a benefit for compensation of actual expenses, lump-sum payments for childbirth and childcare, and funeral costs. Childbirth expenses are not only paid as healthcare benefits, but also as cash benefits in lump-sum payments for childbirth and childcare.

Benefit Rate

The benefit rate for healthcare benefits is 80% for the insurant, 80% if a family member is hospitalized, and 70% for outpatient treatment. However, after April 2003, all of these will be 70%, with 30% as a co-payment. (The benefit rate for infants under three years old is 80%.)

For union-managed health insurance, in order to reduce the co-payment of insurants, authorization has been granted by the Ministry of Health, Labor and Welfare to arbitrarily apply fringe benefits beyond the benefits stipulated by law, according to the financial situation of each individual union.

Responsibility for Pharmaceutical Expenses

If a patient who regularly goes to a medical institution receives medication, he or she pays a portion of that cost as a co-payment, based on the type and quantity of the medication. However, after April 2003 there will be no co-payment.

Meals During Hospitalization

Regarding the cost of meals during hospitalization, for all forms of coverage the patient pays a standard amount determined by the cost of food for the average household (780 yen per day; and for people with low income 650 yen per day for the first three months of hospitalization, and 500 yen per day after four months), and the rest is paid through the healthcare insurance as meal recuperation expenses during hospitalization.

High Medical and Recuperation Cost Coverage

Furthermore, in order to ease the effect of high healthcare costs on household finances, all types of insurance coverage have incorporated a system whereby if a patient's co-payment exceeds a certain amount, he or she is afterwards reimbursed for the excessive amount through health insurance coverage. The general limit on co-payment is 72,300 yen +

(healthcare costs – 361,500 yen) x 1%. However, the amount is determined by a person's income.
Based on the reimbursement afterwards for high medical and recuperations cost, the effective benefit rate is 80.2% for union-managed insurance, and 78.8% for government-managed insurance.

Specific Recuperation Cost

It is prohibited for healthcare service which exceeds the level provided for by the medical treatment fee point table to be claimed by being added to the usual co-payment, or to combine insured diagnosis and treatment with diagnosis and treatment outside the realm of insurance coverage and collect from the patient the cost of the diagnosis and treatment outside the realm of insurance coverage (principle of the prohibition of combined diagnosis and treatment). In other words, for diagnosis and treatment, or for the administering of medicine, which are not covered by healthcare insurance benefits – that is to say, those which are not listed in the medical treatment fee point table or among the standard prices of medicine – all of the healthcare treatment regarding the patient in question shifts from the object of the insurance claim and becomes outside the realm of insurance coverage, and the patient is responsible for the entire amount. However, a system of specified healthcare coverage has been adopted to address the emergence of new technology and the diversification of patients' needs, against a backdrop of remarkable advances in medical technology in recent years. Among the costs for lifestyle service and having a pleasant environment (amenities) (for example, special costs for private rooms, and services including special dental materials such as gold teeth), and the healthcare costs accompanying advancements in technology and research and development, the costs for normal service and healthcare are paid for through healthcare insurance as specific recuperation costs, with other costs being outside the realm of insurance coverage.

C) Fiscal Resources

Insurance premiums and the national treasury cover health insurance business costs.

Insurance Premiums

Insurance premiums are calculated by multiplying the premium rate by the standard monthly salary (determined regularly once every year) paid to an employee, and are collected monthly. Standard monthly salaries are classified from Grade 1 (98,000 yen) to Grade 39 (980,000), and each insurant falls under one of those grades depending upon his or her salary.

Premium Rates for Union-managed Insurance

Premium rates for union-managed insurance are determined by the various health insurance unions, within the range of 3.0% to 9.5%, with the approval of the Ministry of Health, Labor and Welfare. The average premium rate for all unions in March 2003 was 8.514%. As a general rule, the responsibility for the payment premium is split between the employer and the insurant. However, the maximum percentage that the insurant can be responsible for is 4.5%, and the amount that the employer are responsible for may be increased to more than half of the premium amount. As of March 2003, the average premium rate for all unions was 4.787% for business owners, and 3.727% for insurants. The premium amount for which an insurant is responsible is withheld by the employer from the insurant's pay, and the employer are obligated to make the premium payment. The level of premium payment responsibility (fiscal 1998) is 159,000 yen for insurants (364,000 yen when the amount for which business owners are responsible for is included).

Premium Rates for Government-managed Insurance

Premium rates for government-managed insurances range from 6.6% to 9.1%, and can be changed by the minister of health, labor and welfare through deliberation of the Social Security Council. In 2001 the rate was 8.5%. The insurance premium is split between the insurant and the employer. The level of premium payment responsibility (fiscal 1998) is 152,000 yen for insurants (333,000 yen when the amount for which business owners are responsible for is included).

Special Insurance Premiums

Bonuses are normally paid in Japan. The proportion of the bonus to total salary varies from individual to individual. In order to ensure fairness in premium payment responsibility, a special insurance premium is collected from the bonus, which is separate from the monthly insurance premium. Health insurance unions can set the rate of premiums for union-managed health insurance within the 1.0% range and collect those premiums accordingly. However, it is left up to the unions to decide whether to collect the premiums. The rate for special insurance premiums of government-managed health insurance is 1%, and the responsibility of paying these premiums is split between the employer and the insurants. The insurants' responsibility is exempted by 2/5, and the national government pays the difference. After April 2003, a total salary system for levying insurance premiums against bonuses as they are levied against standard salary will be introduced.

Responsibility of National Treasury

Since union-managed health insurance is left to the autonomous management of health insurance unions, as a general rule the national treasury is not responsible for making those payments, with the exception of a portion of the clerical expenses. However, Blue Cross, which faces a stringent financial situation, receives assistance for an extremely small fixed amount.

For government-managed health insurance, in addition to clerical expenses the national treasury is also responsible for paying 13.0% of benefit costs, and 16.4% of the health contributions for the elderly (to be discussed later). The reason that union-managed health insurance is so generously subsidized at public expense is because since the insurants are mainly employees of small and medium-sized business their salary level is lower than that of employees of large corporations. And so the relative burden of paying their insurance premiums is eased by the national treasury.

② National Health Insurance Coverage

A) Beneficiaries and Insurers

National Health Insurance coverage is a compulsory system of healthcare insurance for individual proprietors, people engaged in the agriculture and fishing industries, and retirees who are not eligible for employee's insurance. It represents the last opportunity for universal health insurance. Even foreigners can receive this insurance as long as they are registered as an alien and are expected to stay in Japan for a period of one year or longer.

Insurers of National Health Insurance are mainly cities, towns and villages which are basic municipalities, of which there are 3,242 nationwide. They cover 33.4% of all subscribers. In addition to this are National Health Insurance unions, which are made up of health insurance groups of individual proprietors of the same industry. Currently, the main professions and industries which have National Health Insurance unions are physicians, dentists, pharmacists, the food sales industry, the engineering and construction industries, cosmetology, the bathing industry, and lawyers. There are 166 of these unions nationwide. These do not cover all individual proprietors; and some of them cover the whole nation, while others cover individual prefectures. These unions account for 3.4% of all subscribers.

B) Benefits

There are benefits for recuperation costs. There are also benefits required by law, including those for meals and recuperation costs during hospitalization, specific recuperation costs, recuperation costs, at-home nursing and recuperation costs, high cost healthcare, lump-sum payments for childbirth and childcare, funeral costs, and transportation costs. In addition there are arbitrary benefits in the form of cash benefits for sickness and cash benefits for childbirth which may be arbitrary according to municipal ordinances or union regulations. Each of these types of insurance benefits are similar in content too those of health insurance coverage.

The rate of healthcare benefits is 70% (30% is the responsibility of the insurant). With the reimbursement that is received afterwards because of high healthcare costs, the effective benefit rate is 78.4% for National Health Insurance through municipalities.

C) Fiscal Resources

Insurance Premiums

The method and level of insurance premiums differs from municipality to municipality, and are determined by individual ordinances and/or rules. However, it is common among all municipalities to collect premiums directly from insurants. There are two types of systems of insurance premiums: one is collected as a premium literally as a National Health Insurance premium; the other is collected as a National Health Insurance tax as a type of local tax. Currently, many municipalities use the tax type of system, but aside from the difference in their legal characteristics, the calculation methods for both are basically the same.

There are two types of National Health Insurance premiums. One is the portion that an insurant is responsible for paying, based on what he or she is capable of paying (capable percentage), calculated as a levy standard on the amounts of his or her income and assets, which are determined based on the municipal citizens tax levied by the municipality in which he or she resides. The other is the portion that an insurant is responsible for paying, based on the profit that he or she earns (profit percentage), calculated by a fixed amount for each insurant or for his or her household, which is based on the amount of profit that the insurant receives. As a general rule the ratio between the capable percentage and the profit percentage is fifty-fifty. However, in actuality, in many municipalities the ratio accounted for by capable percentage is higher. Individual premiums for each insurant in a household are paid in one lump sum by the head of that household, adding together the capable percentage and the profit percentage of each insurant. The responsibility level for insurance premiums per household (fiscal 1998) was 154,000 yen for National Health Insurance through municipalities.

Since the premium imposed on low-income earners is sometimes too burdensome, measures have been taken to reduce the burden of those premiums. Those eligible for these measures are households whose income of the previous year was below the basic exemption equivalent value, and households who fell below the basic exemption equivalent value when a fixed amount was deducted per insurant, excluding the head of the household. In each case, the portion that an insurant is responsible for paying, based on the profit that he or she earns, is reduced to 60% and 40%, respectively.

Responsibility of National Treasury

The national treasury is responsible for paying 50% of health insurance contributions for elderly people. In addition, the national government also pays one half of the portion of reductions on insurance premiums of low-income earners carried out by municipalities, with the remainder being the responsibility of prefectures and municipalities.

Generally, many of the people with National Health Insurance are low-income earners, and many of those people are only capable of paying a small amount in premiums. Also, since their employer is not responsible for paying their premium as is the case for people with employee's insurance, a sound means of insurance financing is made possible through assistance by the national government for high rates and large amounts of money. In other words, in order to assure fairness regarding the benefits and responsibilities between types of coverage, the lower the financial capability of the insurance system, the higher the rate of assistance.

③ Healthcare Coverage for Retirees

Basically speaking, since elderly retirees subscribe to National Health Insurance after retirement, the level of their benefits drops at a time when their need for healthcare increases, and the burden of paying those healthcare costs lies mainly with the national treasury and other subscribers to National Health Insurance. In order to correct this irrationality, a system of healthcare coverage for retirees was established in 1984.

The entities enforcing this system are municipalities, which are the insurers of National Health Insurance. The beneficiaries are people who have National Health Insurance (except for elderly people who receive healthcare), elderly people who receive pensions based on pensioners laws (for the right to receive a total pension for an elderly, the person must have subscribed for 20 years or more; or for people beyond the age of forty, for 10 years) and their nonworking dependents.

The fiscal resources needed for this system of insurance coverage are comprised of the premiums (tax) that retired insurants pay for National Health Insurance, and recuperation benefit expense grants covered by donations of insurers of employee's insurance. The amount of the recuperation benefit expense grants is the amount remaining after deducting the National Health Insurance premiums for retirees who had employee's insurance (tax) from the amount which is half of the costs required for healthcare benefits for retirees who had employee's insurance and the contributions for the healthcare cost for the elderly who had employee's insurance, and this is delivered each year to municipalities from the Social Insurance Medical Fee Payment Fund. The costs of paperwork regarding the healthcare of retirees for the recuperation benefit expense grants and the Social Insurance Medical Fee Payment Fund are covered in part by the recuperation benefit expense contributions collected from insurers of employee's insurance through this fund, and by clerical work expense contributions. For this, the amount that each insurer must contribute is the amount of the total contributions divided by the total of the standard compensation amount paid by each insurer.

The healthcare benefit rate is 80% for retirees who had employee's insurance. For their nonworking dependents, it is 70% for outpatient care, and 80% for hospitalization. However, after April 2003, all of these benefit rates will be 70%.

④ Health Insurance Coverage for the Elderly

Under the Elderly Health Law, comprehensive health-related business, including the prevention and treatment of disease, and function training thereof, is carried out to ensure sound health maintenance and adequate healthcare for Japanese citizens in their old age, for the purpose of improving the health of Japanese citizens and improving the welfare of the elderly. And based on the spirit of self-help and unity among Japanese citizens, in addition to constantly endeavoring to maintain and improve their health, with an awareness of the physical and mental changes which accompany aging, and distributing the burden of healthcare costs for the elderly fairly, the basic philosophy of this law is to provide adequate health services to the elderly at the place of work, locally and at home, in accordance with one's age, and mental and physical condition, in order to maintain people's health in old age.

In addition to healthcare benefits, the health-related business based on this law includes the delivery of health notebooks, health education, health counseling, health checkups, function training and at-home or on-site instruction, all of which are carried out by municipalities.

Municipalities are in charge of healthcare-related matters for the elderly under the Elderly Health Law. The beneficiaries of this healthcare for elderly residents of the municipality in question are those who have healthcare insurance, and who are 75 years of age or older, or who are 65 years of age or older but have been recognized by the mayor of the municipality in question as being disabled (so-called bedridden) as prescribed by government ordinance.

The healthcare benefits received are the same as those received under the healthcare insurance laws, and the costs charged for this healthcare are based on medical fees for the elderly.

The responsibility for a portion of elderly patients has been fixed since the establishment of the Elderly Health Law in 1988, and the level of that responsibility differs from the responsibility for a portion of young patients, with a 20% or 30% portion of the responsibility being set at fixed rates lower than those for young people who require it.

The amount has been raised based on revisions to the law, and a system has been introduced for revision based on the rate of fluctuation of consumer prices since 1995. Currently, while the ability of elderly people to pay for healthcare costs has increased due to maturation of pensions, the sense of responsibility for this payment has increased among young people. An appropriate relationship of responsibility that takes root in the unity between generations is a precondition for maintaining Japanese Social Security in the future. For this reason, rather than the uniform assumption that the elderly are weak, the idea is becoming more prevalent that elderly people should be responsible for the portion of their healthcare costs that is suited to their financial ability.

With the reforms in the healthcare insurance system in 2000 came the idea that elderly people should be responsible for a suitable portion of their healthcare costs, and revisions were made to change the fixed 10% rate of responsibility for a portion of patients who had thus far been paying a fixed amount. However, so that the responsibility of elderly people would not increase to an excessive amount, a maximum monthly amount has been established, with preferential measures being established for physicians running their own practices to allow them to choose the system of fixed amount from the viewpoint of the required paperwork load.

Furthermore, with the reforms in the healthcare insurance system in 2002, the age of elderly people eligible for this healthcare increased from those 70 years of age or older to those who are age 75 or older, for a gradual increase in the rate of the public expense load from 30% to 50% over a 5-year period. Also, the percentage for which the patient himself or herself is generally responsibility was increased to 10% (20% for people whose income exceeds a certain amount). However, starting from the age of 70 patients are generally responsible for paying the same 10% as patients who are age 75 or older.

Thirty percent (to gradually increase to 50% over the 5-year period starting in January 2002) of fiscal resources for the necessary benefit costs for healthcare for the elderly are covered at public expense, with the national government responsible for 2/3, prefectures for 1/6 and municipalities for 1/6. The remaining 70% is donated by insurers of government-managed health insurance, union-managed health insurance and National Health Insurance through municipalities. In addition to the above-mentioned portion paid for at public expense, the donated funds are the responsibility of the national treasury, with 16.4% for government-managed health insurance and 50% for National Health Insurance through municipalities. This results in tax fiscal resources of about 50% of benefit costs for healthcare for the elderly, when the 30% which is paid for at public expense is combined with the donations from the national treasury.

(2) Healthcare Covered at Public Expense

Healthcare covered at public expense is a system of coverage by which the national government or local authorities compensate patients for the cost of medical treatment and/or other healthcare expenses, using taxes as a fiscal resource. In healthcare covered at public expense, for diseases which require treatment from the point of view of the national government, including tuberculosis, mental disease and legal communicable diseases, patients are compensated for the cost of medical treatment, while economically- and/or socially-disadvantaged people, including low-income earners, the physically disabled, elderly people, children, people wounded in war, and atom-bomb survivors, are compensated for all or a portion of their healthcare expenses.

Some healthcare covered at public expense includes healthcare costs for which the priority of the responsibility is with the public expense and healthcare costs for which the priority is with healthcare insurance. All or a substantial amount of healthcare costs for which the priority of the responsibility is with public expense is covered by the national government or local authorities, with the remaining portion being applied to insurance. The remainder of the insurance benefits (the portion for which the patient is responsible) or a certain amount of healthcare costs for which the priority is with healthcare insurance is covered at public expense.

(3) Nursing Insurance System

In the past there were two different types of coverage – welfare for the elderly and healthcare for the elderly. But there were disproportions in the usage procedures and the responsibility of users, and problems occurred in the provision of service based on government measures for welfare for the elderly. In addition to restructuring both types of coverage, a system of nursing insurance was established in April 2000 as a system of social health insurance which would allow users to use the service that they themselves chose.

Under the nursing insurance system, the insurers are municipalities, with the national government, prefectures, healthcare insurers, and pension insurers providing important support. The insurants are divided into two categories: first insurants, who are age 65 or older, and second insurants, who are healthcare insurance subscribers between the ages of 40 and 64. The benefit rights and responsibility for paying premiums differ between the two categories.

Benefits from nursing insurance are provided for a first insurant if it is determined that he or she requires nursing or another form of support. Benefits from nursing insurance are provided for a second insurant if it is determined that he or she is bedridden with a specific disease, as stipulated by the Nursing Insurance Law, or otherwise requires nursing or another form of support.

To obtain these insurance benefits an elderly person who is determined to require nursing or a member of his or her family applies with the municipality for these benefits, and that person might then be recognized as requiring these benefits by the nursing recognition examination committee of that municipality. Those committees are made up of people with academic backgrounds in health insurance, healthcare or welfare. The committee findings are based on results from a computer based on an examination of the physical and mental condition of the elderly person (first judgment), and a written report by the physician in charge. Then, after the applicant is notified by the municipality of the results of recognition for the requirement of nursing, if he or she has any objections to those results, that person may challenge those results with the prefectural government or the nursing insurance examination committee.

After being recognized as requiring nursing, if the nursing is to be provided at the patient's home, the patient or his or her family member may then submit a request to a company that provides at-home nursing care for a care plan to be drawn up, taking into consideration the recognized degree of nursing required, the wishes of the patient and the situation of his or her family. If the nursing care is to be provided at a nursing facility, the facility will draw up the care plan.

Service provided to patients who require care at home include home help service and day service. One of these types of service are then provided based on the care plan, with the user responsible for paying 10% of the cost. It is the same for nursing care provided at a nursing facility, with the patient responsible for paying 10% of the cost all services provided, with the exception of meals. If the user desires special services which he or she has chosen, these services may be provided if the user pays the entire cost of the services.

Fifty percent of the cost of the required nursing benefits is covered by the public expense, with the exception of that portion which is the responsibility of the user at the time that the service is rendered. The breakdown is that national government pays 25% of the total, with the prefecture or municipality paying for 12.5%. The 50% of the cost other than the portion covered at public expense is covered by the insurance premiums paid by the insurant. The breakdown between 2000 and 2002 was 17% for first insurants and 33% for second insurants.

Insurance premiums for first insurants are determined for each municipality in accordance with income level. People whose pension exceeds a certain amount have the premium deducted from their pension. All others pay the municipality on their own. Insurance premiums for second insurants are determined based on the method of calculation of the healthcare insurance to which they subscribe. The healthcare insurer collects these premiums in one-lump payments with the healthcare insurance.

(4) Financial Conditions of Healthcare Insurers

Financial conditions of the systems of healthcare insurance have shown deficits across the board.
Taking a look at the closing of accounts of government-managed healthcare insurance, net losses have appeared continuously since 1995, with losses of 316.3 billion yen in fiscal 1999. If things continue as they are, it is believed that the 803.9 billion yen reserve fund from the end of fiscal 1999 will bottom out in fiscal 2002.

Union-managed healthcare insurance has also recorded total losses of 203.3 billion yen (forecast for the end of fiscal 1999), with the total number of unions showing losses at approximately 70%. With this increase in the number of unions showing losses, insurance premiums of healthcare insurance unions

are at an average of 8.51%, which is higher than the 8.5% for government-managed healthcare insurance. There has also been an increase in the number of unions which have been dissolved.
The difference between revenues and expenditures in fiscal 1999 for National Healthcare Insurance through municipalities showed an overall loss of 119 billion yen. Amid this worsening financial situation, with individual insurers which are municipalities showing losses of an approximate 61%, many municipalities are carrying over their fiscal resources for deficit financing from general accounting to special accounting for National Healthcare Insurance.

6. Medical Treatment Fee System

(1) Mechanism of Health Insurance Treatment

A distinguishing feature of the Japanese health insurance system is that rather than the insurer concluding a contract directly with the medical institution, the medical institution is specified by the secretary-general of the local social insurance based on an application by the medical institution.

The specified medical institution is obligated to provide the insurant with recuperation benefits, including medical treatment, as a health insurance medical institution, with the medical fees being paid by the insurer to the health insurance medical institution through an examination payment organization as the cost of the examination.

When receiving medical treatment, insurants pay the portion of the cost for which they are responsible at the payment desk of the health insurance institution.
What's more, not only the medical institution but the physician who is actually in charge of the recuperation must be registered with the secretary-general of the local social insurance as a health insurance physician (double specified system of health insurance treatment). Accordingly, when receiving health insurance treatment, insurants must go to the specified insurance medical institution and receive this treatment by a registered health insurance physician.

Presently, this applies to almost all medical institutions in Japan.

Although all of the medical treatment activities for the same patient are performed by the same medical institution, the reason that insurance medical treatment is specified as double is because all of the medical treatment is administered to the patient by the physician, and based on this, that physician must personally decide what medication, injections or treatment to administer, and bear the responsibility thereof.

(2) Summary of Medical Treatment Fee System

As the cost of recuperation benefits provided by insurance medical institutions, the specified amount that must be paid to the healthcare institution is the medical treatment fee – and the amount remaining after subtracting (from the total medical treatment fee) the portion which is the responsibility of the patient is paid to the healthcare institution. The medical treatment fee is made up of those diagnostic fees specified in detail, including those for examinations, administered drugs, injections, treatment, surgery and tests, as well as the basic fees for hospitalization. The medical treatment fee is revised just about every two years. The medical treatment fee is indicated in points, with 1 point equaling about 10 yen.

Or the medical treatment fee is determined when the minister of health, labor and welfare asks the Central Social Insurance Medical Council* for its views.

In the guaranteed healthcare of Japan, as a general rule healthcare services provided for the purpose of curing disease are not for the cost of healthcare, but rather they are provided as a benefit to the insurant as healthcare services for direct diagnosis and treatment, under the principal of benefit in kind. However, aside for some exceptions, there are two systems of coverage: the system by which the recuperation costs are paid in cash afterwards, and the system of cash benefits.

The Social Insurance Medical Fee Payment Fund and the National Health Insurance Federation, after received payment consignment, pay medical fees to the insurance medical institutions for the value of healthcare treatment provided. The amount is calculated by the physician's medical treatment fee point table for physicians, the dentist's medical treatment fee point table for dentists, and the pharmaceutical fee point table for pharmacies. These point tables are characterized as unit price tables for diagnoses, used to evaluate diagnoses.

Medical fees are revised as part of the Survey in Economic Conditions on Health Care which is conducted once every two years. This revision is made to ensure sound medical business management overall, heeding the deliberation of the Central Social Insurance Medical Council, and giving overall consideration to trends in prices and wages, advances in medical science and healthcare, and the various situations surrounding medical treatment, including the financial situation of insurers.

* Central Social Insurance Medical Council: This council is made up of people involved in diagnosis and treatment (8 committee members representing physicians, dentists and pharmacists), people involved in payment (8 committee members representing insurers of health insurance, seaman's insurance, and National Health Insurance, as well as business owners and ship owners), and people representing the public interest (4 committee members representing the public interest). Appointment of committee members representing the public interest must be approved by both Houses of the National Diet.

Sources

1) Trends in National Hygiene (edited by the Health and Welfare Statistics Association, 2003)
2) White Papers on Public Welfare and Labor, 2003 edition (supervised by the Ministry of Health, Labor and Welfare); Gyosei, 2003
3) White Papers on Healthcare, 2003 edition (supervised by the Medical Treatment Economic Research Organization); planned by the Japan Medical Treatment Project, 2003
4) White Papers on Medical Business (edited by the Editorial Committee of Medical Business); planned by the Japan Medical Treatment Project, 2003
5) Introduction of Social Security 2004 (edited by the Editorial Committee of Introductive Social Security); Chuohoki Publishers, 2004
6) Problems and Perspectives for Reform of Medicare System (edited by the Office of Reform of Elderly Medicare System, the Ministry of Health, Labor and Welfare); Gyosei, 2001
7) Introduction of Medical Insurance and National Health Insurance Drug Price System (edited by the Research Committee for NHI Price System, Association of Tokyo Medical Products Manufacturing Industry); Tokyo Medical Products Manufacturing Company, 2001

APPENDIX – Composition and Indications of 148 Prescriptions

1. Aconite and Ginseng Decoction
附子人参湯
Fu-zi-Ren-Shen-Tang
bushininjinto

Composition	Indications
Ginseng 3.0g	1. Acute enteritis (diarrhea)
Licorice root 3.0g	2. Acute gastritis
Atractylodes ovatae rhizoma 3.0g	3. Irritable bowel syndrome
Steamed and dried ginger 3.0g	4. Intercostal neuralgia
Prepared aconite root 1.0g	

2. Angelica and Peony Powder
当帰芍薬散
Dang-Gui-Shao-Yao-San
tokishakuyakusan

Composition	Indications
Japanese angelica root 3.0g	1. Irregular menstruation
Cnidium rhizoma 3.0g	2. Dysmenorrhea
White peony root 4.0-6.0g	3. Endometriosis
Tuckahoe 4.0g	4. Menopausal disorder
Atractylodes ovatae rhizoma 4.0g	5. Sterility,
Arisma rhizoma 4.0-5.0g	6. Infertility (prevention of miscarriage)
	7. Alzheimer disease
	8. Vascular dementia
	9. Hiesho*

3. Angelica and Peony Powder plus Aconite
当帰芍薬加附子湯
Dang-Gui-Shao-Yao-Ja- Hu-Zi-San
tokishigyakukabushito

Composition	Indications
Japanese angelica root 3.0g	1. Dysmenorrhea
Cnidium rhizoma 3.0g	2. Endometriosis
White peony root 6.0g	3. Irregular menstruation
Tuckahoe 4.5g	4. Sterility
Atractylodes ovatae rhizoma 4.5g	5. Menopausal disorder
Arisma rhizoma 3.5g	6. Hiesho*
Prepared aconite root 1.0g	

4. Angelica Decoction
当帰湯
Dang-Gui-Tang
tokito

Composition	Indications
Japanese angelica root 4-5g	1. Irritable bowel syndrome
Pinellia tuber 4-5g	2. Angina pectoris
White peony root 3-4g	
Magnolia bark 2.5-3g	
Cassia twig 2.5-3g	
Ginseng 2.5-3g	
Steamed and dried ginger 1.5g	
Astragalus root 1.5g	
Zanthoxylum fruit 1.5g	
Licorice root 1.0g	

5. Angelica Middle-Strengthening Decoction
当帰建中湯
Dang-Gui-Jian-Zhong-Tang
tokikenchuto

Composition	Indications
Japanese angelica root 4.0g	1. Dysmenorrhea
Cassia twig 4.0g	2. Hemorrhoids
Dried ginger 4.0g	3. Anemia
Chinese date 4.0g	
White peony root 5-6g	
Licorice root 2.0g	
Malt sugar 20.0g	

6. Angelica Decoction, Antipruritus
当帰飲子
Dang-Gui-Yin-Zi
tokiinshi

Composition	Indications
Japanese angelica root 5.0g	1. Pruritus
White peony root 3.0g	2. Chronic eczema
Cnidium rhizoma 3.0g	3. Atopic dermatitis
Puncturevine caltrop fruit 3.0g	
Divaricate saposhnikovia root 3.0g	
Dried rehmannia root 4.0g	
Fineleaf schizonepeta herb 1.5g	
Astragalus root 1.5g	
Fleeceflower root 2.0g	
Licorice root 1.0g	

7. Antiphlogictic Decoction with Ten Herbs
十味敗毒湯
Shi-Wei-Bai-Du-Tang
jumihaidokuto

Composition	Indications
Bupleurum root 2.0-3.0g	1. Seborrheic dermatitis and dandruff
Pruni jamasakura bark 2.0-3-0g or Quercus bark 2.0-3.0g	2. Pyoderma, folloculitis, furunculosis
Balloonflower root 2.0-3.0g	3. Atopic dermatitis, eczema
Cnidium rhizoma 2.0-3.0g	4. Urticaria
Tuckahoe 2.0-4.0g Double-teeth pulbescent angelica root 1.5-3.0g	5. Pulmoplantar pustolosis
Divaricate saposhnikovia root 1.5-3.0g	6. Rosacea
Licorice root 1.0-1.5g	7. Acne
Dried ginger 1.0g	
Fineleaf schizonepeta herb 1.0-1.5g	
Forsythia capsule 2.0-3.0g	

8. Areca Seed Decoction with Nine Herbs
九味檳榔湯
Jiu-Wei-Bing-Lang-Tang
kumibinroto

Composition	Indications
Areca seed 4.0g	1. Irritable bowel syndrome
Magnolia bark 3.0g	2. Subileus
Cinnamon bark 3.0g	3. Congestive heart failure
Mandarine orange peel 3.0g	4. Beriberi
Perilla leaf 1.5g	
Licorice root 1.0g	
Rhubarb 1.0g	
Dried ginger 1.0g	
Aucklandia root 1.0g	
Medicinal evodia root 1.0g	
Tuckahoe 3.0g	

9. Astragalus Middle-Strengthening Decoction
黄耆建中湯
Huang-Qi-Jian-Zhong-Tang
ogikenchuto

Composition	Indications
Cassia twig 3-4g	1. Decubitus
Dried ginger 3-4g	2. Urticaria
Chinese date 3-4g	3. Atopic dermatitis
White peony root 6.0g	4. Suppurations of skin
Licorice root 2-3g	5. Night sweat
Astragalus root 3-4g	6. Anal fistula
Malt sugar 20.0g	7. Weak constitution

10. "B" Character Decoction
乙字湯
Yi-Zi-Tang
otsujito

Composition	Indications
Japanese angelica root 4.0-6.0g	1. Hemorrhoids
Bupleurum root 4.0-6.0g	2. Anogenital pruritus
Scutellaria root 3.0g	
Licorice root 2.0-3.0g	
Cimicifuga rhizoma 1.0-2.0g	
Rhubarb 0.5-1.5g	

11. Back to the Spleen Decoction
帰脾湯
Gui-Pi-Tang
kihito

Composition	Indications
Ginseng 2-3g	1. Stasis, depressed state
Atractylodes ovatae rhizoma 2-3g	2. Insomnia
Tuckahoe 2-3g	3. Anxiety disorder
Astragalus root 2-3g	4. Disfunctional uterine bleeding
Japanese angelica root 2.0g	5. ITP
Thinleaf milkwort root 1-2g	6. Anemia
Licorice root 1.0g	
Aucklandia root 1.0g	
Chinese date 1-2g	
Dried ginger 1-1.5g	
Wild jujube seed 2-3g	
Longan aril 2-3g	

12. Balloon Flower Root and Gypsum
桔梗石膏
Jie-Geng-Shi-Gao
kikyosekko

Composition	Indications
Balloonflower root 3.0g	
Gypsum 10.0g	It adds for the effect reinforcement due to the inflammation and suppuration disease.

13. Balloon Flower Root Decoction
桔梗湯
Jie-Gebg-Tang
kikyoto

Composition	Indications
Balloonflower root 2.0g	1. Peritonsillitis
Licorice root 1.0-3.0g	

14. Bamboo Shavings Gallbladder-Warming Decoction
竹茹温胆湯
Zhu-Ru-Wen-Dan-Tang
chikujountanto

Composition	Indications
Bupleurum root 3-5g	1. Bronchitis
Bamboo shavings 3.0g	2. Pneumonia
Tuckahoe 3.0g	3. Insomnia
Dwarf lilyturf root 3-4g	
Dried ginger 3.0g	
Pinellia Tuber 3-5g	
Nutgrass galingale rhizoma 2.0g	
Balloonflower root 2-3g	
Tangerine peel 2-3g	
Immature bitter orange 1-2g	
Coptis rhizoma 1-2g	
Licorice root 1.0g	
Ginseng 1-2g	

15. Bupleurum and Cassia Twig Decoction
柴胡桂枝湯
Chai-Hu-Gui-Zhi-Tang
saikokeishito

Composition	Indications
Bupleurum root 5.0g	1. Common cold
Pinellia tuber 4.0g	2. Bronchitis
Scutellaria root 2.0g	3. Dyspepsia, chronic gastritis
Licorice root 1.5-2g	4. Gastroduodenal ulcer
Cinnamon bark 2-3g	5. Irritable bowel syndrome
White peony root 2-3g	6. Cholelithiasis
Chinese date 2.0g	7. Chronic hepatitis
Ginseng 2.0g	8. Anxiety disorder
Dried ginger 1.0g	9. Epilepsy

16. Bupleurum Cassia Twig and Dried Ginger Decoction
柴胡桂枝乾姜湯
Chai-Hu-Gui-Zhi-Gan-Jiang-Tang
saikokeishikankyoto

Composition	Indications
Bupleurum root 5-6g	1. Common cold
Cinnamon bark 3.0g	2. Bronchitis
Scutellaria root 3.0g	3. Anxiety disorder
Oyster shell 3.0g	4. Insomnia
Licorice root 2.0g	5. Chronic hepatitis
Snakegourd fruit 3-4g	6. Arrhythmia
Steamed and dried ginger 2.0g	7. Chronic purulent inflammation

17. Bupleurum Liver-Clearing Decoction
柴胡清肝湯
Chai-Hu-Qing-Gan-Tang
saikoseikanto

Composition	Indications
Bupleurum root 2.0g	1. Atopic dermatitis, eczema
Japanese angelica root 1.5g	2. Acute and chronic tonsillitis
White peony root 1.5g	
Cnidium rhizoma 1.5g	
Dried rehmannia root 1.5g	
Coptis rhizoma 1.5g	
Scutellaria root 1.5g	
Chinese corktree bark 1.5g	
Cape jasmine fruit 1.5g	
Forsythia capsule 1.5g	
Balloonflower root 1.5g	
Arctium fruit 1.5g	
Snakegourd fruit 1.5g	
Wild mint 1.5g	
Licorice root 1.5g	

18. Bupleurum plus Dragon's Bone and Oyster Shell Decoction
柴胡加竜骨牡蛎湯
Chai-Hu-Jia-Long-Gu-Mu-Li-tang
saikokaryukotsuboreito

Composition	Indications
Bupleurum root 4-5g	1. Anxiety disorder, panic disorder
Pinellia tuber 4.0g	2. Insomnia
Tuckahoe 2-3g	3. Hypertension
Cinnamon bark 2-3g	4. Menopausal syndrome
Chinese date 2-2.5g	5. Arrhythmia
Ginseng 2-2.5g	6. Hyperthyroidism
Oyster shell 2-2.5g	7. Conversion disorder
Dried ginger 2-3g	
Scutellaria root 2.5g	
Rhubarb 1.0g	
Dragon's bone 2-2.5g	

19. Cape Jasmine and Corktree Bark Decoction
梔子柏皮湯
Zhi-Zi-Bai-Pi-Tang
shishihakuhito

Composition	Indications
Cape jasmine fruit 3.0g	1. Atopic dermatitis
Licorice root 1.0g	2. Acute and chronic hepatitis
Chinese corktree bark 2.0g	

20. Capillary Wormwood Decoction
茵蔯蒿湯
Yin-Chen-Hao-Tang
inchinkoto

Composition	Indications
Rhubarb 0.8-2g	1. Acute and chronic hepatitis
Cape jasmine fruit 2-3g	2. Urticaria
Capillary wormwood herb 4-6g	3. Cholecystitis・cholelithiasis

21. Capillary Wormwood plus Poria Powder with Five Herbs
茵蔯五苓散
Yin-Chen-Wu-Ling-san
inchingoreisan

Composition	Indications
Arisma rhizoma 4.5-6g	1. Acute and chronic hepatitis
Swordlike atractylodes rhizoma 3-4.5g	2. Liver cirrhosis with ascites
Umbellate pore fungus 3-4.5g	3. Nephrotic syndrome
Tuckahoe 3-4.5g	
Cinnamon bark 2-3g	
Capillary wormwood herb 3-4g	

22. Cassia Twig and Tuckahoe Pill
桂枝茯苓丸
Gui-Zhi-Fu-Ling-Wan
keishibukuryogan

Composition	Indications
Cinnamon bark 4.0g	1. Dysmenorrhea
Tuckahoe 4.0g	2. Endometriosis
Tree peony bark 4.0g	3. Disfunctional uterine bleeding
Peach kernel 4.0g	4. Irregular menstruation
White peony root 4.0g	5. Leiomyoma of the uterus
	6. Menopausal syndrome
	7. Sterility
	8. Low back pain
	9. Hemorrhoids

23. Cassia Twig and Tuckahoe Pill plus Coix Seed
桂枝茯苓丸料加薏苡仁
Gui-Zhi-Fu-Ling-Wan-Liao-Jia-Yi-Yi-Ren
keishibukuryoganryokayokuinin

Composition	Indications
Cassia twig 4.0g	1. Acne
Tuckahoe 4.0g	2. Spot
Tree peony bark 4.0g	3. Hand and finger dermatitis
Peach kernel 4.0g	
White peony root 4.0g	
Coix seed 10.0-20.0g	

24. Cassia Twig Decoction plus Atractylodes and Aconite
桂枝加朮附湯
Gui-Zhi-Jia-Shu-Fu-Tang
keishikajutsubuto

Composition	Indications
Cinnamon bark 4.0g	1. Rheumatoid arthritis
White peony root 4.0g	2. Neuralgia
Chinese date 4.0g	3. Neck pain
Dried ginger 1.0g	4. Low back pain
Licorice root 2.0g	5. Sinusitis
Atractylodes ovatae rhizoma 4.0g	6. Sequela of cerebrovascular disorder
Prepared aconite root 0.5-1g	

25. Cassia Twig Decoction plus Peony
桂枝加芍薬湯
Gui-Zhi-Jia-Shao-Yao-Tang
keishikashakuyakuto

Composition	Indications
Cinnamon bark 4.0g	1. Irritable bowel syndrome
White peony root 6.0g	2. Constipation
Chinese date 4.0g	3. Ulcerative colitis
Dried ginger 1.0g	4. Dyspepsia
Licorice root 2.0g	5. Abdominal pain
	6. Urge urinary incontinence

26. Cassia Twig Decoction plus Peony and Rhubarb
桂枝加芍薬大黄湯
Gui-Zhi-Jia-Shao-Yao-Da-Huang-Tang
keishikashakuyakudaioto

Composition	Indications
Cinnamon bark 4.0g	1. Constipation
White peony root 6.0g	2. Irritable bowel syndrome
Chinese date 4.0g	3. Ulcerative colitis
Dried ginger 1.0-2.0g	
Licorice root 2.0g	
Rhubarb 1.0-2.0g	

27. Cassia Twig Decoction plus Pueraria
桂枝加葛根湯
Gui-Zhi-Jia-Ge-Gen-Tang
keishikakakkonto

Composition	Indications
Cinnamon bark 3.0-4.0g	1. Common cold
White peony root 3.0-4.0g	2. Influenza
Chinese date 3.0-4.0g	
Dried ginger 1.0g	
Licorice root 2.0g	
Pueraria root 6.0g	

28. Cassia Twig Decoction plus Tuckahoe, Atractylodes and Aconite
桂枝加苓朮附湯
Gui-Zhi-Jia-Ling-Shu-Fu-Tang
keishikaryojutsubuto

Composition	Indications
Cinnamon bark 4.0g	1. Rheumatoid arthritis
White peony root 4.0g	2. Neuralgia
Chinese date 4.0g	3. Neck pain
Dried ginger 1.0g	4. Low back pain
Licorice root 2.0g	5. Sinusitis
Tuckahoe 4.0g	6. Sequela of cerebrovascular disorder
Atractylodes ovatae rhizoma 4.0g	
Aconite root 0.5-1.0g	

29. Cassia Twig Peony, and Anemarrhena Decoction
桂芍知母湯
Gui-Shao-Yao-Zhi-Mu-Tang
keishakuchimoto

Composition	Indications
Cinnamon bark 3.0g	1. Rheumatoid arthritis
Common anemarrhena rhizoma 3.0g	2. Arthropathy
Divaricate saposhnikovia root 3.0g	3. Neuralgia
Dried ginger 1.0g	
White peony root 3.0g	
Ephedora 3.0g	
Atractylodes ovatae rhizoma 4.0g	
Licorice root 1.5g	
Prepared Aconite root 1.0g	

30. Cassia Twig plus Astrgalus Decoction
桂枝加黄耆湯
Gui-Zhi-Jia-Huang-Qi-Tang
keishikaogito

Composition	Indications
Cassia twig 3-4g	1. Pyoderma
White peony root 3-4g	2. Atopic dermatitis
Chinese date 3-4g	3. Urticaria
Dried ginger 4.0g	
Licorice root 2.0g	
Astragalus root 3-4g	

31. Cassia Twig plus Dragon's Bone and Oyster Shell Decoction
桂枝加竜骨牡蛎湯
Gui-Zhi-Jia-Long-Gu-Mu-Li-Tang
keishikaryukotsuboreito

Composition	Indications
Cinnamon bark 3-4g	1. Anxiety disorder
White peony root 3-4g	2. Insomnia
Chinese date 3-4g	3. Nocturnal enuresis
Dried ginger 3-4g	4. Arrhythmia
Licorice root 2.0g	5. Nocturnal emission
Dragon's bone 2.0g	
Oyster shell 3.0g	

32. Cassia Twig plus Ginseng Decoction
桂枝人参湯
Gui-Zhi-Ren-Shen-Tang
keishininjinto

Composition	Indications
Cinnamon bark 4.0g	1. Dyspepsia
Ginseng 3.0g	2. Chronic diarrhea, IBS (diarrhea type)
Atractylodes ovatae rhizoma 3.0g	3. Acute enterogastritis
Licorice root 3.0g	4. Headache, migraine
Steamed and dried ginger 2.0g	

33. Cassia Twig plus Magnolia and Apricot Decoction
桂枝加厚朴杏仁湯
Gui-Zhi-Jia-Hou-Pu-Xing-Ren-Tang
keishikakobokukyoninto

Composition	Indications
Cassia twig 3-4g	1. Common cold
White peony root 3-4g	2. Bronchitis
Chinese date 3-4g	3. Athma
Dried ginger 3-4g	
Licorice root 2.0g	
Magnolia bark 1-4g	
Bitter apricot kernel 3-4g	

34. Cassia Twig Decoction
桂枝湯
Gui-Zhi-Tang
keishito

Composition	Indications
Cassia twig 3-4g	1. Common cold
White peony root 3-4g	2. Influenza
Chinese date 3-4g	
Dried ginger 4.0g	
Licorice root 2.0g	

35. Channels-Dredging and Blood-Activating Decoction
疎経活血湯
Shu-Jing-Huo-Xie-Tang
sokeikakkestuto

Composition	Indications
Japanese angelica root 2.0g	1. Neck pain
Dried rehmannia root 2.0g	2. Low back pain, sciatic neuralgia
Cnidium rhizoma 2.0g	3. Rheumatoid arthritis
Swordlike atractylodes rhizoma 2.0g	4. Osteoarthritis(osteoarthritis of knee)
Tuckahoe 2.0g	5. Rotator cuff disorders
Peach kernel 2.0g	6. Neuralgia
White peony root 2.5g	7. Trigger finger (snapping finger)
Twotooth achyranthes root 1.5g	8. Thrombophlebitis
Clematidis root 1.5g	
Fourstamen stephania root 1.5g	
Notopterygii root 1.5g	
Divaricate saposhnikovia root 1.5g	
Wine-fried Chinese gentian root 1.5g	
Dried ginger 1-1.5g	
Tangerine peel 1.5g	
Dahurican angelica root 1-1.5g	
Licorice root 1.0g	

36. Cimicifuga and Pueraria Decoction
升麻葛根湯
Sheng-Ma-Ge-Gen-Tnag
shomakakkonto

Composition	Indications
Pueraria root 5-6g	1. Measles
Cimicifuga rhizoma 1-3g	2. Rubella
Dried ginger 1-3g	3. Varicella
White peony root 3.0g	
Licorice root 1.5-3.0g	

37. Coix Seed Decoction
薏苡仁湯
Yi-Yi-Ren-Tang
yokuininto

Composition	Indications
Ephedra 4.0g	1. Rheumatoid arthritis
Japanese angelica root 4.0g	2. Osteoarthritis
Atractylodes ovatae rhizoma 4.0g	3. Neck pain
Coix seed 8-10g	4. Rotator cuff disorders
Cinnamon bark 3.0g	
White peony root 3.0g	
Licorice root 2.0g	

38. Cold Limbs Powder
四逆散
Si-Ni-San
shigyakusan

Composition	Indications
Bupleurum root 2-5g	1. Anxiety disorder
White peony root 2-4g	2. Irritable bowel syndrome
Immature bitter orange 2.0g	3. Chronic gastritis
Licorice root 1-2g	4. Cholecystitis、cholelithiasis
	5. Conversion disorder
	6. Somatization disorder

39. Combined Minor Bupleurum Decoction and Pinellia and Magnolia Decoction
柴朴湯
Chai-Pu-Tang
saibokuto

Composition	Indications
Chinese date 2-3g	1.Asthma
Bupleurum root 4-7g	2. Acute and chronic bronchitis
Scutellaria root 3.0g	3. Dyspepsia
Tuckahoe 5.0g	4. Anxiety disorder
Perilla leaf 2.0g	
Licorice root 2.0g	
Dried ginger 3-4g	
Ginseng 2-3g	
Pinellia tuber 5-6g	
Magnolia bark 3.0g	

40. Combined Minor Bupleurum Decoction and Minor Chest Congestion Decoction
柴陥湯
Chai-Xian-Tang
saikanto

Composition	Indications
Bupleurum root 5.0-7.0g	1. Bronchitis
Pinellia tuber 5.0g	2. Dyspepsia, gastritis
Scutellaria root 3.0g	3. Pleuritis
Chinese date 3.0g	4. Anxiety disorder
Ginseng 2.0-3.0g	5. Reflux esophagitis
Coptis rhizoma 1.5g	
Licorice root 1.5-2.0g	
Dried ginger 3.0-4.0g	
Snakegourd fruit 3.0g	

41. Combined Tuckahoe Decoction and Pinellia and Magnolia Decoction
茯苓飲合半夏厚朴湯
Fu-Ling-Yin-He-Ban-Xia-Hou-Pu-Tang
bukuryoingohangekobokuto

Composition	Indications
Tuckahoe 5.0g	1. Acute or chronic gastritis
Atractylodes ovatae rhizoma 4.0g	2. Dyspepsia
Ginseng 3.0g	3. Reflux esophagitis
Dried ginger 1.0-1.5g	
Tangerine peel 3.0g	
Immature bitter orange 1.0-2.0g	
Pinellia tuber 5.0-6.0g	
Magnolia bark 3.0g	
Perilla leaf 2.0g	

42. Combined Umbellate Fungus Decoction and Four Herbs Decoction
猪苓湯合四物湯
Zhu-Ling-Tang-He-Si-Wu-Tang
choreitogoshimostuto

Composition	Indications
Each component of umbellate(Pore) Fungus decoction	1. Cystitis・urethritis
Japanese angelica root 3.0-4.0g	2. Chronic prostatitis
White peony root 3.0-4.0	3. Idiopathic renal hemorrhage
Cnidium rhizoma 3.0-4.0	4. Urinary calculus
Dried rehmannia root 3.0-4.0	

43. Combined Half Cassia Twig Decoction and Ephedra Half Decoction
桂麻各半湯
Gui-Ma-Ge-Ban-Tang
keimakakuhanto

Composition	Indications
Cassia twig 3-3.5g	1. Common cold
White peony root 2.0g	2. Influenza
Dried ginger 2.0g ＊	3. Urticaria
Licorice root 2.0g	
Ephedra 2.0g	
Chinese date 2.0g	
Bitter apricot kernel 2-2.5g	

44. Coptis Decoction
黄連湯
Huang-Lian-Tang
orento

Composition	Indications
Coptis rhizoma 3.0g	1. Acute and chronic gastritis
Licorice root 3.0g	2. Gastroduodenal ulcer
Steamed and dried ginger 1-3g	3. Dyspepsia
Ginseng 2-3g	4. Reflux esophagitis
Cassia twig 3.0g	5. Irritable bowel syndrome
Chinese date 3.0g	6. Stomatitis
Pinellia tuber 5-6g	7. Atopic dermatitis

45. Coptis Detoxificating Decoction
黄連解毒湯
Huang-Lian-Jie-Du-Tang
orengedokuto

Composition	Indications
Coptis rhizoma 1.5-2g	1. Anxiety disorder, insomnia
Chinese corktree bark 1.5-3g	2. Acute or chronic gastritis
Scutellaria root 3.0g	3. Gastrointestinal bleeding
Cape jasmine fruit 2-3g	4. Stomatitis, glossitis, period ontitis toothache (odontalgia) (dentalgia)
	5. Atopic dermatitis, eczema
	6. Photodermatitis
	7. Hypertension
	8. Epistaxis,gingival bleeding

46. Cyperus and Perilla Leaf Powder
香蘇散
Xiang-Su-San
kososan

Composition	Indications
Nutgrass galingale rhizoma 3.5-6g	1. Common cold
Perilla leaf 1-2g	2. Anxiety disorder
Tangerine peel 2-3g	3. Irritable bowel syndrome
Licorice root 1-1.5g	4. Urticaria (depends on the seafood)
Dried ginger 1-2g	5. Menopausal syndrome
	6. Chronic gastritis

47. Divaricate Saposhnikovia Miraculous Powder
防風通聖散
Fang-Feng-Tong-Sheng-San
bofutsushosan

Composition	Indications
Japanese angelica root 1.2g	1. Common cold, bronchitis
White peony root 1.2g	2. Sinusitis
Cnidium rhizoma 1.2g	3. Pyoderma, urticaria
Cape jasmine fruit 1.2g	4. Obesity
Forsythia capsule 1.2g	5. Hypertention
Wild mint 1.2g	6. Constipation
Dried ginger 1.2g	
Fineleaf schizonepeta herb 1.2g	
Divaricate saposhnikovia root 1.2g	
Ephedora 1.2g	
Rhubarb 0.5g	
Mirabilite 1.5g	
Atractylodes ovatae rhizoma 2.0g	
Balloonflower root 2.0g	
Scutellaria root 2.0g	
Licorice root 2.0g	
Gypsum 2-3g	
Talc 3-5g	

48. Dreging and Dissipating Powder
通導散
Tong-Dao-San
tsudosan

Composition	Indications
Japanese angelica root 3.0g	1. Contusion
Rhubarb 3.0g	2. Irregular menstruation
Mirabilite 3-4g	3. Dysmenorrhea
Immature bitter orange 2-3g	4. Hypertension
Magnolia bark 2.0g	5. Menopausal syndrome
Tangerine peel 2.0g	6. Constipation
Akebia stebia stem 2.0g	
Safflower 2.0g	
Sappan wood 2.0g	
Licorice root 2.0g	

49. Dwarf Lilyturf Decoction
麦門冬湯
Mai-Men-Dong-Tang
bakumondoto

Composition	Indications
Dwarf lilyturf root 8-10g	1. Bronchitis (with dry cough)
Pinellia tuber 5.0g	2. Asthma
Rice 5.0g	3. Dry eye
Chinese date 3.0g	4. Sjögren syndrome
Ginseng 2.0g	5. Dyspepsia, chronic gastritis
Licorice root 2.0g	

50. Ephedra, Aconite and Manchurian Wildginger Decoction
麻黄附子細辛湯
Ma-Huang-Fu-Zi-Xi-Xin-Tang
maobushisaishinto

Composition	Indications
Ephedra 4.0g	1. Allergic rhinitis
Manchurian wildginger herb 3.0g	2. Common cold
Prepared aconite root 1.0g	3. Bronchitis
	4. Headache

51. Ephedra, Apricot, Licorice and Gypsum Decoction
麻杏甘石湯
Ma-Xing-Gan-shi-Tang
makyokansekito

Composition	Indications
Gypsum 10.0g	1. Common cold
Bitter apricot kernel 4.0g	2. Acute and chronic bronchitis
Ephedra 4.0g	3. Asthma
Licorice root 2.0g	4. Hemorrhoids

52. Ephedra Decoction
麻黄湯
Ma-Huang-Tang
maoto

Composition	Indications
Ephedra 4.0-5.0g	1. Common cold
Bitter apricot kernel 4.0-5.0g	2. Influenza
Cinnamon bark 3.0-4.0g	3. Rhinostenosis
Licorice root 1.5-2.0g	

53. Ephedra, Apricot, Coiw and Licorice Decoction
麻杏薏甘湯
Ma-Xing-Yi-Gan-Tang
makyoyokukanto

Composition	Indications
Coix seed 10.0g	1. Rheumatoid arthritis
Bitter apricot kernel 3.0g	2. Arthralgia（joint pain）
Ephedra 4.0g	3. Myalgia
Licorice root 2.0g	4. Neuralgia
	5. Warts

54. Evodia Decoction
呉茱萸湯
Wu-Zhu-Yu-Tang
goshuyuto

Composition	Indications
Medicinal evodia root 3-4g	1. Headache, migraine
Ginseng 2-3g	2. Acute or chronic gastritis
Chinese date 3-4g	3. Gastroduodenal ulcer
Dried ginger 4-6g	4. Nausea, vomiting

55. Evodia, Fresh Ginger plus Chinese Angelica Cold Limbs Decoction
当帰四逆加呉茱萸生姜湯
Dang-Gui-Si-Ni-Jia-Wu-Zhu-Yu-Sheng-Jiang-Tang
tokishigyakukagoshuyushokyoto

Composition	Indications
Japanese angelica root 3.0g	1. Low back pain, sciatic neuralgia
Cinnamon bark 3.0g	2. Headache
Akebia stebia stem 3.0g	3. Dysmenorrhea
Manchurian wildginger herb 2.0g	4. Abdominal pain
Medicinal evodia root 1-2g	5. Raynaud's syndrome
Licorice root 2.0g	6. Chilblain(erythema pernio)
White peony root 3.0g	
Dried ginger 4.0g	
Chinese date 5.0g	

56. Five Tiger Decoction
五虎湯
Wu-Hu-Tang
gokoto

Composition	Indications
Ephedra 4.0g	1. Common cold
Bitter apricot kernel 4.0g	2. Acute and chronic bronchitis
licorice root 2.0g	3. Asthma
Gypsum 10.0g	
White mulberry root-bark 2-3g	

57. For Contusion Decoction
治打撲一方
Zhi-Da-Pu-Yi-Fang
jidabokuippo

Composition	Indications
Cassia twig 3.0g	1. Contusion
Cnidium rhizoma 3.0g	
Nuphar rhizoma 3.0g	
licorice root 1.5g	
Rhubarb 1-1.5g	
Cloves 1-1.5g	
Quercus bark 3.0g	

58. For Eczema Decoction
治頭瘡一方
Zhi-Tou-Chuang-Yi-Fang
jizusoippo

Composition	Indications
Cnidium rhizoma 3.0g	1. Atopic dermatitis, eczema
Swordlike atractylodes rhizoma 3.0g	2. Seborrheic dermatitis
Forsythia capsule 3.0g	
Divaricate saposhnikovia root 2.0g	
licorice root 1.0g	
Fineleaf schizonepeta harb 1.0g	
Safflower 1.0g	
Rhubarb 0.5g	
Lonicera reef and stalk 2.0g	

59. Four Gentlemen Decoction
四君子湯
Si-Jun-Zi-Tang
shikunshito

Composition	Indications
Ginseng 4.0g	1. Chronic gastritis・gastric atony
Atractylodes ovatae rhizoma 4.0g	2. Chronic wasting disease
Tuckahoe 4.0g	
Chinese date 1-2g	
licorice root 1-2g	
Dried ginger 3-4g	

60. Four Herbs Decoction
四物湯
Si-Wu-Tang
shimotsuto

Composition	Indications
Japanese angelica root 3-4g	1. Dysmenorrhea
white peony root 3-4g	2. Irregular menstruation
Cnidium rhizoma 3-4g	3. Menopausal syndrome
Dried rehmannia root 3-4g	

61. Fourstaman Stephania Decoction
木防已湯
Mu-Fang-Yi-Tang
mokuboito

Composition	Indications
Gypsum 10.0g	1. Congestive heat failure
Fourstamen stephania root 4.0g	2. Asthma
Cinnamon bark 3.0g	
Ginseng 3.0g	

62. Gentian Liver-Purging Decoction
竜胆瀉肝湯
Long-Dan-Xie-Gan-tang
ryutanshakanto

Composition	Indications
Dried rehmannia root 5.0g	1. Cystitis, urethritis
Japanese angelica root 5.0g	2. Chronic prostatitis
Akebia stebia stem 5.0g	3. Anogenital pruritus
Scutellaria root 3.0g	4. Atopic dermatitis
Plantain seed 3.0g	5. Hypertension
Arisma rhizoma 3.0g	6. Anxiety disorder
Licorice root 1-1.5g	
Cape jasmine fruit 1-1.5g	
Wine-fried Chinese gentian root 1-1.5g	

63. Ginseng and Perilla Decoction
参蘇飲
Shen-Su-Yin
jinsoin

Composition	Indications
Pinellia Tuber 3.0g	1. Common cold
Tuckahoe 3.0g	2. Bronchitis
Lobed kudzuvine root 2.0g	3. Bronchial asthma
Balloonflower root 2.0g	
Tangerine peel 2.0g	
Chinese date 1.5g	
Ginseng 1.5g	
licorice root 1.0g	
Immature bitter orange 1-1.5g	
Perilla leaf 1-1.5g	
Dried ginger 1.5g	
White flower hogfennel root 2.0g	

64. Ginseng Decoction
人参湯
Ren-Shen-Tang
ninjinto

Composition	Indications
Ginseng 3.0g	1. Acute and chronic gastritis
Atractylodes ovatae rhizoma 3.0g	2. IBS(diarrhea type)
licorice root 3.0g	3. Acute enterogastritis
Steamed and dried ginger 2-3g	4. Anorexia

65. Ginseng Nutrition Decoction
人参養栄湯
Ren-Shen-Yang-Rong-Tang
ninjinyoeito

Composition	Indications
Ginseng 3.0g	1. Improvement of weakening according to chronic disease
Japanese angelica root 4.0g	2. After operation, after radiotherapy
white peony root 2-4g	3. Thrombocytopenia
Dried rehmannia root 4.0g	4. Mucous membrane dryness
Atractylodes ovatae rhizoma 4.0g	5. Pressure sore・chronic skin ulcer
Tuckahoe 4.0g	6. Insomnia
Cassia twig 2.5g	
Astragalus root 1.5-2.5g	
Tangerine peel 2-2.5g	
Thinleaf milkwort root 1.5-2g	
Chinese magnoliavine 1-1.5g	
licorice root 1-1.5g	

66. Goddess Powder
女神散
N¨u-Shen-San
nyoshinsan

Composition	Indications
Nutgrass galingale rhizoma 3-4g	1. Anxiety disorder
Cnidium rhizoma 3.0g	2. Postpartum psychiatric disorder
Swordlike atractylodes rhizoma 3.0g	3. Irregular menstruation
Japanese angelica root 3-4g	
Scutellaria root 2-4g	
Cassia twig 2-3g	
Ginseng 1.5-2g	
Areca seed 2-4g	
Coptis rhizoma 1-2g	
licorice root 1-1.5g	
Clove flower-bud 0.5-1g	
Aucklandia root 1-2g	

67. Head-Clearing Divaricate Saposhnikovia Decoction
清上防風湯
Qing-Shang-Fang-Feng-Tang
seijobofuto

Composition	Indications
Baikai skullcap root 3.0-5.0g	1. Acne
Balloonflower root 2-3g	2. Atopic dermatitis, eczema
Cape jasmine fruit 1.5-3g	3. Common cold・tonsillitis
Cnidium rhizoma 2-3g	4. Chronic sinusitis
Divaricate saposhnikovia root 2-3g	
Dahurican angelica root 2-3g	
Forsythia capsule 2-3g	
Coptis rhizoma 1-1.5	
licorice root 1-1.5g	
Immature bitter orange 1-1.5g	
Fineleaf schizonepeta harb 1-1.5g	
Wild mint 1-1.5g	

68. Heart-Clearing Lotus Seed Decoction
清心蓮子飲
Qing-Xin-Lian-Zi-Yin
seishinrenshiin

Composition	Indications
Dwarf lilyturf root 4.0g	1. Chronic cystitis
Tuckahoe 4.0g	2. Chronic prostatitis
Baikai skullcap root 3.0g	3. Neurogenic bladder
Plantain seed 3.0g	4. Diabetes mellitus
Ginseng 3.0g	
Astragalus root 2.0g	
licorice root 1.5-2g	
Lotus seed 4.0g	
Chinese wolfberry root-bark 2.0g	

69. Hemp Seed Pill
麻子仁丸
Ma-Zi-Ren-Wan
mashiningan

Composition	Indications
Rhubarb 3.5-4g	1. Constipation・scybalum
Immature bitter orange 2.0g	2. Frequent urination (pollakiuria)
Bitter apricot kernel 2-2.5g	
Magnolia bark 2.0g	
White peony root 2.0g	
Hemp seed 4-5g	

70. Instant Effective Powder
立効散
Li-Xiao-San
rikkosan

Composition	Indications
Manchurian wildginger herb 1.5-2g	1. Toothache(odontalgia)(dentalgia)
Cimicifuga rhizoma 1.5-2g	2. Periodontitis
Divaricate saposhnikovia root 2-3g	
Licorice root 1.5-2g	
Wine-fried Chinese gentian root 1-1.5g	

71. Intestinal Carbuncle Decoction
腸癰湯
Chang-Yong-Tang
choyoto

Composition	Indications
Coix seed 9.0g	1. Appendicitis
Peach kernel 5.0g	2. Pelvic inflammatory disease
Waxgourd seed 6.0g	
Tree peony bark 4.0g	

72. Intestines-Moistening Decoction
潤腸湯
Run-Chang-Tang
junchoto

Composition	Indications
Dried rehmannia root 6.0g	1. Constipation・scybalim
Japanese angelica root 3.0g	
Scutellaria root 2.0g	
Immature bitter orange 0.5-2g	
Bitter apricot kernel 2.0g	
Magnolia bark 2.0g	
Rhubarb 1-3g	
Licorice root 1-1.5g	
Hemp seed 2.0g	

73. Kidney-Qi Pill
八味地黄丸
Ba-Wei-Di-Huang-Wan
hachimijiogan

Composition	Indications
Dried rehmannia root 5.0-6.0g	1. Chronic nephritis, nephritic syndrome
Dogwood fruit 3.0g	2. Hypertension
Chinese yam 3.0g	3. Diabetes mellitus, diabetic neuropathy
Arisma rhizoma 3.0g	4. Prostatic hypertrophy, chr. prostitis
Tuckahoe 3.0g	5. Urge urinary incontinence
Tree peony bark 3.0g	6. Low back pain
Cinnamon bark 1.0g	7. Osteoporosis after menopause
Aconite root 1.0g	8. Cataract
	9. Senile pruritus
	10. Male infertility
	11. Erectile dysfunction
	12. Asthma
	13. Congestive heart failure

74. Licorice Decoction
甘草湯
Gan-Cao-Tang
kanzoto

Composition	Indications
Licorice root 5-8g	1. Pharyngodynia

75. Licorice, Wheat and Chinese Date Decoction
甘麦大棗湯
Gan-Mai-Da-Zao-Tang
kambakutaisoto

Composition	Indications
Chinese date 5.0g	1. Conversion disorder
Licorice root 5.0g	2. Breath holding spells
Wheat 20.0g	3. Sleep terrors
	4. Anxiety disorder

76. Life-Preserving Kidney-Qi Pill
牛車腎気丸
Niu-Che-Shen-Qi-Wan
goshajinkigan

Composition	Indications
Dried rehmannia root 5-6g	1. Diabetic neuropathy
Asiantic cornelian cherry Fruit 3.0g	2. Low back pain, sciatic neuralgia
Chinese yam 3.0g	3. Frequent urination (pollakiuria)
Arisma rhizoma 3.0g	
Tuckahoe 3.0g	
Tree peony bark 3.0g	
Cinnamon bark 1.0g	
Prepared aconite root 0.5-1g	

77. Liver-Inhibiting Powder
抑肝散
Yi-Gan-San
yokukansan

Composition	Indications
Swordlike atractylodes rhizoma 4.0g	1. Anxiety disorder
Tuckahoe 4.0g	2. Insomnia
Cnidium rhizoma 3.0g	3. Senile dementia
Japanese angelica root 3.0g	4. Menopausal syndrome
Bupleurum root 2.0g	5. Parkinson's disease, Parkinson's syndrome
Licorice root 1.5g	6. Autism, ADHD
Gambirplant hooked stem and branch 3.0g	7. Sleep terror, night cry, tic disorder

78. Liver-Inhibiting Powder plus Tangerine Peel, Pinellia Tuber
抑肝散加陳皮半夏
Yi-Gan-San-Jia-Chen-Pi-Ban-Xia
yokukansankachimpihange

Composition	Indications
Japanese angelica root 3.0g	1. Anxiety disorder
Gambirplant hooked stem and branch 3.0g	2. Isommnia
Cnidium rhizoma 3.0g	3. Senile dementia
Atractylodes ovatae rhizoma 4.0g	4. Menopausal syndrome
Tuckahoe 4.0g	5. Parkinson'sdisease, Parkinson's syndrome
Bupleurum root 3.0g	6. Autism, ADHD
Licorice root 1.5g	7. Sleep terror, night cry, tic disorder
Tangerine peel 3.0g	8. Chronic gastritis
Pinellia tuber 5.0g	

79. Lung-Clearing Decoction
清肺湯
Qing-Fei-Tang
seihaito

Composition	Indications
Japanese angelica root 3.0g	1. Bronchitis
Dwarf lilyturf root 2.0g	2. Bronchiectasia
Tuckahoe 3.0g	3. Asthma
Scutellaria root 2.0g	4. Pneumonia
Balloonflower root 2.0g	
Bitter apricot kernel 2.0g	
Cape jasmine fruit 2.0g	
White mulberry root-bark 2.0g	
Chinese date 2.0g	
Tangerine peel 2.0g	
Licorice root 1-1.5g	
Chinese magnoliavine 0.5-2g	
Dried ginger 1.0g	
Bamboo shavings 2.0g	
Dwarf lilyturf root 3.0g	
Tendrilleaf fritillary bulb 2.0g	

80. Magnolia Flower, Lung-Clearing Decoction
辛夷清肺湯
Xin-Yi-Qing-Fei-Tang
shin'iseihaito

Composition	Indications
Common anemarrhena rhizoma 3.0g	1. Sinusitis
Scutellaria root 3.0g	2. Hypertrophic nasal polyp
Cape jasmine fruit 1.5-3g	3. Bronchitis
Dwarf lilyturf root 5-6g	4. Sino-broncho syndrome
Gypsum 6.0g	
Cimicifuga rhizoma 1-1.5g	
Magnolia flower 2-3g	
Lilii bulbus 3.0g	
Loquat leaf 1-3g	

81. Major Bupleurum Decoction
大柴胡湯
Da-Chai-Hu-Tang
daisaikoto

Composition	Indications
Bupleurum root 6.0g	1. Hypertension
Pinellia tuber 3.0-4.0g	2. Dyspepsia, acute and chronic gastritis
Dried ginger 4.0-5.0g	3. Cholelithiasis, cholecistitis, pancreati- tis
Scutellaria root 3.0g	4. Hyperlipemia
White peony root 3.0g	5. Obesity
Chinese date 3.0g	6. Anxiety disorder, insommia
Immature bitter orange 2.0g	7. Asthma
Rhubarb 1.0-2.0g	8. Alopecia areata
	9. Constipation

82. Major Bupleurum Decoction without Rhubarb
大柴胡湯去大黄
Da-Chai-Hu-Tang-
daisaikotokyodaio

Composition	Indications
Bupleurum root 6.0g	1. Hypertension
Pinellia tuber 3.0-4.0g	2. Dyspepsia, acute and chronic gastritis
Dried ginger 1.0g	3. Cholelithiasis, cholecistitis, pancreati- tis
Scutellaria root 3.0g	4. Hyperlipemia
White peony root 3.0g	5. Obesity
Chinese date 3.0g	6. Anxiety disorder, insommia
Immature bitter orange 2.0g	7. Asthma
	8. Alopecia areata

83. Major Divaricate Saposhuikovia Decoction
大防風湯
Da-Fang-Feng-Tang
daibofuto

Composition	Indications
Astragalus root 3.0g	1. Rheumatoid arthritis
Dried rehmannia root 3.0g	2. Arthralgia (joint pain)
White peony root 3.0g	
Swordlike atractylodes rhizoma 3.0g	
Japanese angelica root 3.0g	
Divaricate saposhnikovia root 3.0g	
Cnidium rhizoma 2.0g	
Licorice root 1.5g	
Twotooth achyranthes root 1.5g	
Chinese date 1.5g	
Ginseng 1.5g	
Notopterygii root 1.5g	
Eucommia bark 3.0g	
Steamed and dried ginger 1.0g	
Prepared aconite root 0.5g	

84. Major Middle-Strengthening Decoction
大建中湯
Da-Jian-Zhong-Tang
daikenchuto

Composition	Indications
Ginseng 2-3g	1. Ileus
Zanthoxylum fruit 1-2g	2. Constipation
Steamed and dried ginger 3-5g	3. Urinary stone disease
Malt sugar 20.0g	

85. Major Purgative Decoction
大承気湯
Da-Cheng-Qi-Tang
daijokito

Composition	Indications
Magnolia bark 5.0g	1. Constipation
Immature bitter orange 3.0g	
Rhubarb 2.0g	
Mirabilite 1.3g	

86. Meridian-Warming Decoction
温経湯
Wen-Jing-Tang
unkeito

Composition	Indications
Dwarf lilyturf root 3-10g	1. Abnormal menstrual cycle (oligomenorrhea, polymenorrhea, menstrual irregularity)
Pinellia tuber 3-5g	2. Dysmenorrhea
Japanese angelica root 2-3g	3. Menopausal symptome
Licorice root 2.0g	4. Progressive palmoplanter keratoderma
Cinnamon bark 2.0g	5. Chilblain
White peony root 2.0g	
Cnidium rhizoma 2.0g	
Ginseng 2.0g	
Tree peony bark 2.0g	
Medicinal evodia root 1-3g	
Dried ginger 1-2g	
Donkey-hide gelatin 2.0g	

87. Middle-Reinforcing and Qi-Benefiting Decoction
補中益気湯
Bu-Zhong-Yi-Qi-Tang
hochuekkito

Composition	Indications
Astragalus root 3-4g	1. Increase of physical strength
Ginseng 4.0g	2. Chronic gastritis・anorexia
Licorice root 1-1.5g	3. Nutritional supplementation before and after surgical operation,radiation sockness (prevention and treatment)
Chinese date 2.0g	4. Myasthenia gravis
Japanese angelica root 3.0g	5. Atopic dermatitis
Tangerine peel 2.0g	6. Idiopathic renal hemorrhage
Dried ginger 0.5g	7. Infection caused by methicillin-resistant staphyiococcus aureus
Bupleurum root 1-2g	
Cimicifuga rhizoma 0.5-1g	

88. Middle-Soothing Powder
安中散
An-Zhog-San
anchusan

Composition	Indications
Cinnamon bark 3-5g	1. Dyspepsia
Corydalis tuber 3-4g	2. Reflux esophagitis
Oyster shell 3-4g	3. Acute or chronic gastritis
Fennel fruit 1.5-2g	4. Gastroduodenal ulcer
Villous amomum fruit 1-2g	5. Chronic pancreatitis
Licorice root 1-2g	6. Dysmenorrhea
Lesser galangal rhizoma 0.5-1g	

89. Minor Blue Dragon Decoction
小青竜湯
Xiao-Qing-Long-Tang
shoseiryuto

Composition	Indications
Ephedra 2-3g	1. Allergic rhinitis - allergic conjunctivitis
Cinnamon bark 2-3g	2. Asthma, asthmatic bronchitis
Manchurian wildginger herb 2-3g	3. Common cold
Pinellia tuber 3-6g	4. Nephrotic syndrome
White peony root 2-3g	
Licorice root 2-3g	
Steamed and dried ginger 2-3g	
Manchurian wildginger herb 1.5-3g	

90. Minor Bupleurum Decoction
小柴胡湯
Xiao-Chai-Hu-Tang
shosaikoto

Composition	Indications
Bupleurum root 4.0-7.0g	1. Common cold, influenza
Scutellaria root 3.0g	2. Tonsilitis, otitis media
Chinese date 2.0-3.0g	3. Bronchitis, asthma
Ginseng 2.0-3.0g	4. Pleuritis
Licorice root 2.0g	5. Dyspepsia
Dried ginger 4.0g	6. Acute and chronic hepatitis
Pinellia tuber 4.0-5.0g	7. Anxiety disorder
	8. Subacute thiroiditis

91. Minor Bupleurum Decoction plus Poria Powder with Five Herbs
柴苓湯
Chai-Ling-Tang
saireito

Composition	Indications
Chinese date 2-3g	1. Nephrotic syndrome
Bupleurum root 4-7g	2. Chronic nephritis, IgA-nephritis
Scutellaria root 3.0g	3. Rheumatoid arthritis
Tuckahoe 3-4.5g	4. Serous otitis media
Cinnamon bark 2-3g	5. Gastroenteritis
Umbellate pore fungus 3-4.5g	6. Reproductive autoimmune failure syndrome (RAFS)
Licorice root 2.0g	
Dried ginger 4.0g	
Ginseng 2-3g	
Pinellia tuber 4-5g	
Arisma rhizoma 5-6g	
Atractylodes ovatae rhizoma 3-4.5g	

92. Minor Bupleurum Decoction plus Balloon Flower Root and Gypsum
小柴胡湯加桔梗石膏
Xiao-Chai-Hu-Tang-Jia-
Jie-Geng-Shi-Gao
shosaikotokakikyosekko

Composition	Indications
Bupleurum root 4-7g	1. Pharyngitis - tonsillitis - peritonsillitis
Pinellia tuber 4-7g	2. Parotitis
Dried ginger 4.0g	3. Bronchitis
Scutellaria root 3.0g	4. Otitis media
Chinese date 2-3g	5. Subacute thyroiditis
Ginseng 2-3g	
Licorice root 2.0g	
Balloonflower root 3.0g	
Gypsum 10.0g	

93. Minor Middle-Strengthening decoction
小建中湯
Xiao-Jian-Zhong-Tang
shokenchuto

Composition	Indications
White peony root 6.0g	1. Dyspepsia
Cinnamon bark 3-4g	2. Constipation, irritable bowel syndrome
Chinese date 3-4g	3. Gastroduodenal ulcer
Licorice root 6.0g	4. Chronic hepatitis
Dried ginger 3-4g	5. Infirm constitution
Malt sugar 20.0g	

94. Minor Pinellia Decoction plus Tuckahoe
小半夏加茯苓湯
Xiao-Ban-Xia-Jia-Fu-Ling-Tan
shohangekabukuryoto

Composition	Indications
Pinellia tuber 5-8g	1. Morning sickness
Dried ginger 5-8g	2. Nausea, vomiting
Tuckahoe 3-5g	3. Hyperemesis gravidarm

95. Modified Back to the Spleen Decoction
加味帰脾湯
Jia-Wei-Gui-Pi-Tang
kamikihito

Composition	Indications
Ginseng 2-3g	1. Stasis, depressed state
Atractylodes ovatae rhizoma 2-3g	2. Insomnia
Tuckahoe 2-3g	3. Anxiety disorder
Astragalus root 2-3g	4. Disfunctional uterine bleeding
Japanese angelica root 2.0g	5. ITP
Thinleaf milkwort root 1-2g	6. Anemia
Bupleurum root 3.0g	
Cape jasmine fruit 2.0g	
Licorice root 1.0g	
Aucklandia root 1.0g	
Chinese date 1-2g	
Dried ginger 1.5g	
Wild jujube seed 2-3g	
Longan aril 2-3g	

96. Modified Merry Life Powder
加味逍遥散
Jia-Wei-Xiao-Yao-San
kamishoyosan

Composition	Indications
Japanese angelica root 3.0g	1. Premenstrual syndrome
White peony root 3.0g	2. Dysmenorrhea
Atractylodes ovatae rhizoma 3.0g	3. Irregular menstruation
Tuckahoe 3.0g	4. Menopausal syndrome
Bupleurum root 3.0g	5. Chronic hepatitis
Tree peony bark 2.0g	6. Liver cirrhosis（early stage）
Cape jasmine fruit 2.0g	7. Chronic gastritis
Licorice root 1.5-2g	8. Irritable bowel syndrome
Dried ginger 1.0g	9. Anxiety disorder, insomnia
Wild mint 1.0g	10. Hand and finger dermatitis

97. Mystery Decoction
神秘湯
Shen-Bi-Tang
shimpito

Composition	Indications
Tangerine peel 2.5-3g	1. Bronchial asthma
Perilla leaf 1.5-3g	2. Bronchitis
Bupleurum root 2-4g	
Ephedra 3-5g	
Licorice root 2.0g	
Magnolia bark 3.0g	
Bitter apricot kernel 4.0g	

98. North Water God Decoction
真武湯
Zhen-Wu-Tang
shimbuto

Composition	Indications
Tuckahoe 5.0g	1. IBS, chronic diarrhea
White peony root 3.0g	2. Congestive heat failure
Dried ginger 1.0g	3. Vertigo, dizziness, meniere's disease
Atractylodes ovatae rhizoma 3.0g	4. Common cold - bronchitis
Prepared aconite root 1.0g	5. Nephritis - nephrotic syndrome
	6. Urticaria - pruritus

99. Open the Spleen Decoction
啓脾湯
Qi-Pi-Tang
keihito

Composition	Indications
Swordlike atractylodes rhizoma 4.0g	1. Chronic diarrhea
Tuckahoe 4.0g	2. IBS (diarrhea type)
Chinese yam 3.0g	
Ginseng 3.0g	
Oriental waterplantain rhizoma 2.0g	
Tangerine peel 2.0g	
licorice root 1.0g	
Lotus seed 3.0g	
Manchurian wildginger herb 2.0g	

100. Peach Kernel Purgative Decoction
桃核承気湯
Tao-He-Cheng-Qi-Tang
tokakujokito

Composition	Indications
Peach kernel 5.0g	1. Constipation
Cassia 4.0g	2. Anxiety disorder, conversion disorder
Rhubarb 1-3g	3. Endometritis
Licorice root 1.5g	4. Contusion
Mirabilite 1-2g	5. Menopausal syndrome

101. Peony and Licorice Decoction
芍薬甘草湯
Shao-Yao-Gan-Cao-Tang
shakuyakukanzoto

Composition	Indications
White peony root 3-6g	1. Cramp of the leg muscles
Licorice root 3-6g	2. Hyper prolactinism
	3. Acne

102. Peony, Licorice and Aconite Decoction
芍薬甘草附子湯
Shao-Yao-Gan-Cao-
shakuyakukanzobushito

Composition	Indications
White peony root 3-6g	1. Low back pain
Licorice root 3-6g	2. Cramp of the leg muscles
Aconite root 1.0g	3. Dysmenorrhea

103. Pinellia and Magnolia Decoction
半夏厚朴湯
Ban-Xia-Hou-Pu-Tang
hangekobokuto

Composition	Indications
Pinellia tuber 5-6g	1. Anxiety disorder
Magnolia bark 3.0g	2. Dyspepsia
Tuckahoe 5.0g	3. Asthma
Perilla leaf 2.0g	4. Foreign-body sensation in the throat
Dried ginger 3-4g	

104. Pinellia Heart-Purging Decoction
半夏瀉心湯
Ban-Xia-Xie-Xin-Tang
hangeshashinto

Composition	Indications
Pinellia tuber 4-5g	1. Dyspepsia
Scutellaria root 2.5-3.0g	2. Acute and chronic gastritis
Steamed and dried ginger 2.0-2.5g	3. Gastroduodenal ulcer
Ginseng 2.5-3.0g	4. Irritable bowel syndrome
Licorice root 2.5-3.0g	5. Reflux esophagitis
Chinese date 2.5-3.0g	
Coptis rhizoma 1.0g	

105. Pinellia, Largehead Atractylodes and Tall Gastordia Decoction
半夏白朮天麻湯
Ban-Xia-Bai-Shu-Tian-Ma-Tang
hangebyakujutsutemmato

Composition	Indications
Pinellia tuber 3.0g	1. Vertigo
Atractylodes ovatae rhizoma 3.0g	2. Meniere's syndrome (meniere's disease)
Swordlike atractylodes rhizoma 3.0g	3. Headache
Tangerine peel 3.0g	4. Dyspepsia
Tuckahoe 3.0g	5. Chronic sinusitis
Malt 1.5-2.0g	
Tall gastrodia rhizoma 2.0g	
Dried ginger 0.5-2.0g	
Astragalus Root 1.5g	
Ginseng 1.5g	
Arisma rhizoma 1.5g	
Chinese corktree bark 1.0g	

106. Poria Decoction with Four Herbs
四苓湯
Si-ling-Tang
shireito

Composition	Indications
Arisma rhizoma 4.0g	1. Edema
Tuckahoe 4.0g	2. Nephritis
Atractylodes ovatae rhizoma 4.0g	
Umbellate pore fungus 4.0g	

107. Poria Powder with Five Herbs
五苓散
Wu-Ling-San
goreisan

Composition	Indications
Arisma rhizoma 5.0-6.0g	1. Headache
Tuckahoe 3.0-4.5g	2. Rotavirus infection
Atractylodes ovatae rhizoma 3.0-4.5g	3. Edema
Umbellate pore fungus 3.0-4.5g	4. Cerbral edema in acute stage of cerebral infarction
Cinnamon bark 2.0-3.0g	5. Chronic nephritis
	6. Hydrocelle testis
	7. Vertigo, dizziness

108. Powder for Five Kinds of Stagnations
五積散
Wu-Ji-San
goshakusan

Composition	Indications
Tuckahoe 2.0g	1. Enterogastritis (gastroenteritis)
Atractylodes ovatae rhizoma 3.0-4.0g	2. Low back pain
Tangerine peel 2.0 g	3. Arthralgia; joint pain
Pinellia tuber 2.0g	4. Menalgia
Japanese angelica root 1.5-2.0g	5. Oversensitivity to cold
White peony root 1.0 2.0g	
Cnidium rhizoma 1.0-2.0g	
Magnolia bark 1.0-2.0g	
Dahurican angelica root 1.0-2.0g	
Immature bitter orange 1.0-2.0g	
Balloonflower root 1.0-2.0g	
Dried ginger 1.0-2.0g	
Cinnamon bark 1.0-2.0g	
Ephedra 1.0-2.0g	
Chinese date 1.0-2.0g	
Licorice root 1.0-2.0g	

109. Powder for Five Kinds of Stranguria
五淋散
Wu-Lin-San
gorinsan

Composition	Indications
Tuckahoe 5.0-6.0g	1. Cystitis・urethritis
Japanese angelica root 3.0g	2. Chronic prostatitis
Scutellaria root 3.0g	
Licorice root 3.0g	
White peony root 2.0g	
Cape jasmine fruit 2.0g	
Dried rehmannia root 3.0g	
Arisma rhizoma 3.0g	
Akebia stebia stem 3.0g	
Talc 3.0g	
Plantain seed 3.0g	

110. Pueraria Decoction
葛根湯
Ge-Gen-Tang
kakkonto

Composition	Indications
Pueraria root 8.0g(4.0g)	1. Common cold, influenza
Ephedra 4.0g(3.0g)	2. Neck pain, rotator cuff disorders
Chinese date 4.0g(3.0g)	3. Sinusitis, otitis media, conjunctivitis
Cinnamon bark 3.0g(2.0g)	4. Trigeminal neuralgia, facial paralysis
White peony root 3.0g(2.0g)	5. Temporomandibular arthritis
Licorice root 2.0g(2.0g)	6. Urticaria
Dried ginger 1.0g(1.0g)	7. Oligogalactia
	8. Stress urinary incontinence

111. Pueraria Decoction plus Atractylodes and Aconite
葛根加朮附湯
Ge-Gen-Jia-Shu-Fu-Tang
kakkonkajutsubuto

Composition	Indications
Pueraria root 4.0g	1. Trigeminous neuralgia
Ephedra 3.0g	2. Neck pain
Cinnamon bark 2.0g	3. Rotator cuff disorders (frozen shoulder)
Licorice root 2.0g	4. Headache
White peony root 2.0g	5. Chronic sinusitis
Chinese date 3.0g	
Dried ginger 1.0g	
Swordlike atractylodes rhizoma 3.0g	
Prepared aconite root 0.5g	

112. Pueraria Decoction plus Szeshwan Lovage and Magnolia Flower
葛根湯加川芎辛夷
Ge-Gen-Tang-Jia-Chuan-Xiong-Xin-Yi
kakkontokasenkyushin'i

Composition	Indications
Pueraria root 8.0g(4.0g)	1. Acute or chronic sinusitis
Ephedra 4.0g(3.0g)	2. Allergic rhinitis
Chinese date 4.0g(3.0g)	3. Serous otitis media
Cinnamon bark 3.0g(2.0g)	
White peony root 3.0g(2.0g)	
Licorice root 2.0g(2.0g)	
Dried ginger 1.0g(1.0g)	
Cnidium rhizoma 2.0-3.0g	
Magnolia flower 2.0-3.0g	

113. Purple Cloud Ointment
紫雲膏
Zi-Yun-Gao
shiunko

Composition	Indications
Sesame oil 100.0g	1. Burn
Japanese angelica root 10.0g	2. Hemorrhoids
Lithospermum root 10.0g	
White beeswax 27.0g	
Lard 1.8g	

114. Pus-Discharging Powder and Decoction
排膿散及湯
Pai-Nong-San-Ji-Tang
hainosankyuto

Composition	Indications
Balloonflower root 4.0g	1. Suppuration
licorice root 3.0g	2. Palmoplantar pustulosis
Immature bitter orange 3.0g	3. Pyoderma
white peony root 3.0g	
Chinese date 3.0g	
Dried ginger 1.0g	

115. Rhubarb and Licorice Decoction
大黄甘草湯
Da-Huang-Gan-Cao-Tang
daiokanzoto

Composition	Indications
Rhubarb 4.0g	1. Constipation
Licorice root 1.0-2.0g	

116. Rhubarb and Moutan Bark Decoction
大黄牡丹皮湯
Da-Huang-Mu-Dan-Pi-Tang
daiobotampito

Composition	Indications
Rhubarb 1.0-2.0g	1. Appenndecitis
Tree peony bark 4.0g	2. Constipation
Peach kernel 4.0g	3. Pelvic inflammatory disease
Mirabilite 4.0g	4. Hemorrhoids
Waxgourd seed 4.0-6.0g	

117. Roasted Licorice Decoction
炙甘草湯
Zhi-Gan-Cao-Tang
shakanzoto

Composition	Indications
Roasted licorice root 3.0-4.0g	1. Palpitation, arrhythmia
Dried ginger 1.0g	2. Hyperthiroidism
Cinnamon bark 3.0g	3. Angina pectoris
Hemp seed 3.0g	
Chinese date 3.0-5.0g	
Ginseng 2.0-3.0g	
Dried rehmannia root 4.0-6.0g	
Dwarf lilyturf root 6.0g	
Donkey-hide gelatin 2.0g	

118. Schizonepeta and Forsythia Decoction
荊芥連翹湯
Jing-Jie-Lian-Qiao-Tang
keigairengyoto

Composition	Indications
Japanese angelica root 1.5g	1. Common cold
White peony root 1.5g	2. Acute tonsillitis
Cnidium rhizoma 1.5g	3. Acute and chronic sinusitis
Dried rehmannia root 1.5g	4. Acne
Coptis rhizoma 1.5g	5. Atopic dermatitis
Scutellaria root 1.5g	
Chinese corktree bark 1.5g	
Cape jasmine fruit 1.5g	
Forsythia capsule 1.5g	
Fineleaf Schizonepeta harb 1.5g	
Divaricate saposhnikovia root 1.5g	
Wild mint 1.5g	
Mature bitter orange 1.5g	
Licorice root 1.0-1.5g	
Dahurican angelica root 1.5-2.5g	
Balloonflower root 1.5-2.5gt	
Bupleurum root 1.5-2.5g	

119. Scutellaria Decoction
黄芩湯
Huang-qin-tang
ogonto

Composition	Indications
Scutellaria root 4.0g	1. Acute enteritis
White peony root 3.0g	2. Salmonella gastroenteritis, gastroenteritis caused by Escherichia coli
Licorice root 3.0g	
Chinese date 4.0g	

120. Seven Herbs Decoction for Hypertension
七物降下湯
Qi-Wu-Jiang-Xia-Tang
shichimotsukokato

Composition	Indications
Japanese angelica root 3.0-4.0g	1. Hypertension
White peony root 3.0-4.0g	2. Menopausal syndrome
Cnidium rhizoma 3.0-4.0g	
Dried rehmannia root 3.0-4.0g	
Gambirplant hooked stem and branch 3.0-4.0g	
Astragalus root 2.0-3.0g	
Chinese corktree bark 2.0g	

121. Six Gentlemen Decoction
六君子湯
Liu-Jun-Zi-Tang
rikkunshito

Composition	Indications
Ginseng 2.0-4.0g	1. Dyspepsia(GARD)
Atractylodes ovatae rhizoma 3.0-4.0g	2. Chronic gastritis
Tuckahoe 3.0-4.0g	3. Gastroduodenal ulcer
Pinellia tuber 3.0-4.0g	4. Anorexia
Tangerine peel .20-4.0g	5. Anxiety disorder
Chinese date 2.0g	6. Irritable bowel syndrome
Licorice root 1.0-1.5g	7. Reflux esophagitis
Dried ginger 0.5g	

122. Six-Ingredient Pill with Rehmannia
六味丸
Liu-Wei-wan
rokumigan

Composition	Indications
Dried rehmannia root 5.0-6.0g	1. Diabetes mellitus
Dogwood fruit 3.0g	2. Chronic nephritis, nephritic syndrome
Chinese yam 3.0g	3. Urge urinary incontinence, pllakiuria
Arisma rhizoma 3.0g	4. Prostatic hypertrophy, chr. prostitis
Tuckahoe 3.0g	5. Low back pain
Tree peony bark 3.0g	6. Hypertension
	7. Growth failure

123. Stephania and Astragalus Decoction
防已黄耆湯
Fang-Yi(ji)-Huang-Qi-Tang
boiogito

Composition	Indications
Astragalus root 5.0g	1. Osteoarthritis (of knee), hydroarthrosis
Fourstamen stephania root 4-5g	2. Rheumatoid arthritis
Atractylodes ovatae rhizoma 3.5g	3. Chronic nephritis, nephritic syndrome
Chinese date 3-4g	4. Idiopathic edema
licorice root 1.5-2g	5. Obesity
Dried ginger 3.0g	

124. Stomach-Calming Powder
平胃散
Ping-Wei-San
heiisan

Composition	Indications
Swordlike atractylodes rhizoma 4.0g	1. Dyspepsia
Magnolia bark 3.0g	2. Acute and chronic gastritis
Tangerine peel 3.0g	3. Reflux esophagitis
Chinese date 2.0g	
Licorice root 1.0g	
Dried ginger 0.5-1.0g	

125. Stomach-Calming Powder and Poria Powder with Five Herbs
胃苓湯
Wei-Ling-Tang
ireito

Composition	Indications
Swordlike atractylodes rhizoma 2.5-3g	1. Dyspepsia
Magnolia bark 2.5-3g	2. Acute or chronic enterogastritis
Tangerine peel 2.5-3g	
Umbellate pore fungus 2.5-3g	
Arisma rhizoma 2.5-3g	
White peony root 2.5-3g	
Atractylodes ovatae rhizoma 2.5-3g	
Tuckahoe 2.5-3g	
Cinnamon bark 2-2.5g	
Chinese date 1.5-3g	
Dried ginger 1.5-2g	
Licorice root 1-2g	
Villous amomum Fruit 2.0g	
Coptis rhizoma 2.0g	

126. Stomach-Regulating Purgative Decoction
調胃承気湯
Tiao-Wei-Cheng-Qi-Tang
choijokito

Composition	Indications
Rhubarb 2.0-2.5g	1. Constipation
Licorice root 1.0g	
Mirabilite 1.0g	

127. Summer Heat-Clearing and Qi-Benefiting Decoction
清暑益気湯
Qing-Shu-Yi-Qi-Tang
seishoekkito

Composition	Indications
Ginseng 3.0-3.5g	1. Chronic hepatitis
Atractylodes ovatae rhizoma 3.0-3.5g	2. Anorexia
Dwarf lilyturf root 3.0-3.5g	3. Malaise
Japanese angelica root 3.0g	4. Heat stroke
Astragalus root 3.0g	
Tangerine peel 2.0-3.0g	
Chinese magnoliavine 1.0-2.0g	
Chinese corktree bark 1.0-2.0g	
Licorice root 1.0-2.0g	

128. Swordlike Atractylodes and Largehead Atractylodes Decoction
二朮湯
Er-Shu-Tang
nijutsuto

Composition	Indications
Atractylodes ovatae rhizoma 1.5-2.5g	1. Rotator cuff disorders
Tuckahoe 1.5-2.5g	2. Neck pain
Tangerine peel 1.5-2.5g	3. Osteoarthritis
Arisaematis tuber 1.5-2.5g	4. Low back pain
Nutgrass galingale rhizoma 1.5-2.5g	5. Rheumatoid arthritis
Scutellaria root 1.5-2.5g	
Clematidis root 1.5-2.5g	
Notopterygii root 1.5-2.5g	
Pinellia tuber 2.0-4.0g	
Swordlike Atractylodes rhizoma 1.5-3.0g	
Licorice root 1.0-1.5g	
Dried ginger 0.6-1.0g	

129. Szechwan Lovage and Angelica Decoction for Regulating Blood Flow
芎帰調血飲
Xiong-Gui-tiao-Xue-Yin
kyukichoketsuin

Composition	Indications
Japanese angelica root 2.0g	1. Subinvolution of uterus
Cnidium rhizoma 2.0g	2. Postnatal stasis
Dried rehmannia root 2.0g	3. Dysmenorrhera
Atractylodes ovatae rhizoma 2.0g	4. Premenstrual syndrome
Tuckahoe 2.0g	5. Dysfunctional uterine bleeding
Tangerine peel 2.0g	6. Osteoarthritis(knee)
Combined spicebush root 2.0g	7. Arteriosclerosis obliterans
Nutgrass galingale rhizoma 2.0g	8. ITP
Tree peony bark 2.0g	
Motherwort Herb 1.5g	
Chinese date 1.5g	
Licorice root 1.0g	
Dried ginger 1.0-2.0g	

130. Szechwan Lovage Rhizoma, Angelica Root, Ass-hide Glue and Argy Wormwood Leaf Decoction
芎帰膠艾湯
Xiong-Gui-Jiao-Ai-Tang
kyukikyogaito

Composition	Indications
Cnidium rhizoma 3.0g	1. Hemorrhoidal bleeding
Licorice root 3.0g	2. Dysfunctional uterine bleeding
Argyi leaf 3.0g	3. Anemia
Japanese angelica root 4.0-4.5g	4. ITP
White peony root 4.0-4.5g	
Dried rehmannia root 5.0-6.0g	
Donkey-hide gelatin 3.0g	

131. Tea-Blended Szechwan Lovage Powder
川芎茶調散
Chuan-Xiong-Cha-Tiao-San
senkyuchachosan

Composition	Indications
Dahurican angelica root 2.0g	1. Headache
Notopterygii root 2.0g	2. Common cold
Fineleaf Schizonepeta herb 2.0g	3. Allergic rhinitis
Divaricate saposhnikovia root 2.0g	4. Sinusitis
Wild mint 2.0g	
Licorice root 1.5g	
Green tea reef 1.5g	
Cnidium rhizoma 3.0g	
Nutgrass galingale rhizoma 4.0g	

132. Ten Strong Tonic Herbs Decoction
十全大補湯
Shi-Quan-Da-Bu-Tang
juzentaihoto

Composition	Indications
Ginseng 2.5-3.0g	1. Increase of physical strength after operation and after chemotherapy
Astragalus root 2.5-3.0g	2. Radiation sickness, radiation injury
Atractylodes ovatae rhizoma 3.0g	3. Anemia
Tuckahoe 3.0g	4. Puressure ulcer
Japanese angelica root 3.0g	5. MRSA infection
White peony root 3.0g	6. Rheumatoid arthritis
Dried rehmannia root 3.0g	7. Wasting state,wasting disease
Cnidium rhizoma 3.0g	
Cinnamon bark 3.0g	
Licorice root 1.5g	

133. Three Herbs Baikal Skullcap Decoction
三物黄芩湯
San-Wu-Huang-Qin-Tang
sammotsuogonto

Composition	Indications
Scutellaria root 3.0g	1. Palmoplantar pustulosis
Sophora root 3.0g	2. Hand and finger dermatitis
Dried rehmannia root 6.0g	3. Atopic dermatitis, eczema

134. Three Huang Heart-Clearing Decoction with Three yellow color Herbs
三黄瀉心湯
San-Huang-Xie-Xin-Tang
san'oshashinto

Composition	Indications
Rhubarb 1.0-2.0g	1. Acute or chronic gastritis
Scutellaria root 1.0-1.5g	2. Gastrointestinal bleeding
Coptis rhizoma 1.0-1.5g	3. Epistaxis,gingival bleeding
	4. Anxiety disorder, insomnia
	5. Hypertension
	6. Constipation

135. Tuckahoe Decoction
茯苓飲
Fu-Ling-Yin
bukuryoin

Composition	Indications
Tuckahoe 5.0g	1. Dyspepsia
Atractylodes ovatae rhizoma 4.0g	2. Acute or chronic gastritis
Ginseng 3.0g	3. Reflux esophagitis
Dried ginger 1.0-3.0g	
Tangerine peel 3.0g	
Immature bitter orange 1.0-2.0g	

136. Tuckahoe, Cassia Twig, Largehead Atractylodes and Licorice Decoction
苓桂朮甘湯
Ling-Gui-Shu-Gan-Tang
ryokeijutsukanto

Composition	Indications
Tuckahoe 6.0g	1. Vertigo
Cinnamon bark 4.0g	2. Orthostatic hypotension
Atractylodes ovatae rhizoma 3.0g	3. Headache
Licorice root 2.0g	4. Meniere's syndrome (Meniere's disease)
	5. Hypotension

137. Tuckahoe, Ginger, Largehead Atractylodes and Licorice Decoction
苓姜朮甘湯
Ling-Jiang-Shu-Gan-Tang
ryokyojutsukanto

Composition	Indications
Tuckahoe 6.0g	1. Low back pain, sciatic neuralgia
Steamed and dried ginger	2. Frequent urination (pollakiuria)
Atractylodes ovatae rhizoma 3.0g	
Licorice root 2.0g	

138. Tuckahoe, Licorice, Dried Ginger, Schisandra, Manchurian Wildginger, Pinellia and Apricot Decoction
苓甘姜味辛夏仁湯
Ling-Gan-Jiang-Wei-Xin-Xia-Ren-Tang
ryokankyomishingeninto

Composition	Indications
Bitter apricot kernl 4.0g	1. Acute and chronic bronchitis
Pinellia tuber 4.0g	2. Bronchiectasis
Tuckahoe 4.0g	3. Pulmonary emphysema
Chinese magnoliavine 3.0g	
Licorice root 2.0g	
Manchurian wildginger herb 2.0g	
Steamed and dried ginger 2.0g	

139. Two Vintage Herbs Decoction
二陳湯
Er-Chen-Tang
nichinto

Composition	Indications
Pinellia tuber 5.0-7.0g	1. Acute or chronic gastritis
Tuckahoe 3.5-5.0g	2. Bronchitis
Tangerine peel 3.5-4.0g	
Dried ginger 1.0g	
Licorice root 1.0-2.0g	

140. Umbellate Fungus Decoction
猪苓湯
Zhu-Ling-Tang
choreito

Composition	Indications
Umbellate pore fungus 3.0g	1. Cystitis, urethritis
Tuckahoe 3.0g	2. Urinary calculus
Talc 3.0g	3. Hematuria
Arisma rhizoma 3.0g	
Donkey-hide gelatin 3.0g	

141. Uncaria Powder
釣藤散
Diao(gou)-Teng-San
chotosan

Composition	Indications
Gambirplant Hooked Stem and Branch 3.0g	1. Hypertension
Tangerine peel 3.0g	2. Headache
Pinellia tuber 3.0g	3. Vascular dementia
Dwarf lilyturf root 3.0g	4. Alzheimer disease
Tuckahoe 3.0g	5. Tinnitus
Ginseng 2.0g	6. Parkinson disease
Divaricate saposhnikovia root 2.0g	7. Sequela of cerebrovascular system
Chrysanthemum flower 2.0g	
licorice root 1.0g	
Steamed and dried ginger 1.0g	
Gypsum 5.0-7.0g	

142. Warming and Clearing Decoction
温清飲
Wen-Qing-Yin
unseiin

Composition	Indications
Japanese angelica root 3.0-4.0g	1. Atopic dermatitis, eczema
Dried rehmannia root 3.0-4.0g	2. Urticaria
White peony root 3.0-4.0g	3. Abnormal menstrual cycle (oligomenorrhea, polymenorrhea, menstrual irregularity)
Cnidium rhizoma 3.0-4.0g	4. Behcet's disease
Coptis rhizoma 1.5-2.0g	5. Hypertension
Scutellaria root 1.5-3.0g	6. Stomatitis
Cape jasmine fruit 1.5-2.0g	7. Endometriosis
Chinese corktree bark 1.5-2.0g	

143. White Tiger plus Ginseng Decoction
白虎加人参湯
Bai-Hu-Jia-Ren-Shen-Tang
byakkokaninjinto

Composition	Indications
Common anemarrhena rhizoma 5-6g	1. Diabetes mellitus
Gypsum 15-16g	2. Atopic dermatitis
licorice root 2.0g	3. Heat stroke
Ginseng 1.5-3g	4. Stomatitis
Rice 8-10g	5. Periodontal diseases
	6. Rhumatoid arthritis

144. Wild Jujube Seed Decoction
酸棗仁湯
Suan-Zao-Ren-Tang
sansoninto

Composition	Indications
Wild jujube seed 7.0-15.0g	1. Insomnia
Common anemarrhena rhizoma 5-6g	2. Anxiety disorder
Cnidium rhizoma 3.0g	3. Lethargy
Tuckahoe 5.0g	
Licorice root 1.0g	

145. Wind Dispersing Powder
消風散
Xiao-Feng-San
shofusan

Composition	Indications
Japanese angelica root 3.0g	1. Urticaria
Dried rehmannia root 3.0g	2. Atopic dermatitis, eczema
Gypsum 3.0-5.0g	3. Seborrheic dermatitis
Divaricate saposhnikovia root 2.0g	4. Prurigo, strophlus
Swordlike atractylodes rhizoma 2.0g	
Akebia stebia stem 2.0-5.0g	
Arctium fruit 2.0g	
Common anemarrhena rhizone 1.5g	
Hemp seed 1.5g	
Cicada slough 1.0g	
Sophora root 1.0g	
Fineleaf schizonepeta herb 1.0g	
Licorice root 1.0-1.5g	

146. Yin Nourishing and Fire-Eliminating Decoction
滋陰降火湯
Zi-Yin-jiang-Huo-Tang
jiinkokato

Composition	Indications
Swordlike atractylodes rhizoma 3.0g	1. Chronic bronchitis
Dried rehmannia root 2.5g	2. Acute and chronic pharyngitis
White peony root 2.5g	3. Bronchiectasia
Tangerine peel 2.5g	
Dwarf lilyturf root 2.5g	
Chinese corktree bark 1.5g	
Licorice root 1.5g	
Common anemarrhena rhizoma 1.5g	
Cochinchinese asparagus root 2.5g	

147. Yin Nourishing Real Treasure Decoction
滋陰至宝湯
ZI-Yin-Zhi-Bao-Tang
jiinshihoto

Composition	Indications
Nutgrass galingale rhizoma 2-3g	1. Acute or chronic bronchitis
Bupleurum root 1-3g	2. Bronchiectasia
White peony root 2-3g	
Common anemarrhena rhizoma 2-3g	
Tangerine peel 2-3g	
Japanese angelica root 2-3g	
Dwarf lilyturf root 2-3g	
Atractylodes ovatae rhizoma 2-3g	
Tuckahoe 2-3g	
Licorice root 1.0g	
Wild mint 1.0g	
Chinese wolfberry root-bark 2-3g	
Tendrilleaf fritillary bulb 1-2g	

148. Yue Bi Decoction for Relieving Edema plus Atractylodes
越婢加朮湯
Yue-Bi-Jia-Shu-Tang
eppikajutsuto

Composition	Indications
Gypsum 8.0g	1. Rheumatoid arthrites
Ephedra 6.0g	2. Osteoarthritis
Swordlike atractylodes rhizoma 4.0g	3. Gouty arthritis
Chinese date 3.0g	4. Atopic dermatitis
Licorice root 2.0g	5. Nephritis, nephrotic syndrome
Dried ginger 1.0g	6. Allergic rhinitis
	7. Herpes zoster

History of the Cherry Trees in Washington, D.C.

The plantings of cherry trees originated in 1912 as gift of friendship to the United States from the people of Japan. In Japan, the flowering cherry tree or "Sakura", as it is called by the Japanese people, is one of the most exalted flowering plants. The beauty of the cherry blossom is a potent symbol equated with evanescence of human life and epitomizes the transformations Japanese Culture has undergone through the ages.

Excerpted from National Park Service