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 $_{
m this}$ method employs medical supplementary traditional 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		
No energy	10	Tongue with pale white or red fur,		
Tire easily	10	hypertrophied 8		
Drowsiness during the day	6	Weak pulse 8		
Loss of appetite	4	Weak and soft abdominal wall		
Catch cold easily	8	Symptoms of internal organ atonia 1) 10		
Be easily startled	4	Subumbilical insensitivity ²⁾ 6		
		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	18 Symptoms periodically get worse		
Dull headache, sense of develop	ping	Difficulties getting up in the morning 8		
a cold	8	A lot of flatulence	6	
Feeling of throat congestion	12	Belching	4	
Feeling of thoraci oppression	8	Sensation of residual urine	4	
Feeling of stasis in the		Abdominal tympanicity	8	
hypochondrium	8			
Abdominal distention	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 t	Easily startled	6			
body and cold in the lower half	Attacks of restlessness	8			
Palpitation attacks 8		Facial flushes	10		
Paroxysmal headaches	8	Epiumbilical palpitation ²⁾	14		
Vomitting (with little nausea) 8		Feeling of cold in the lower or all four			
Cough associated with anger	10	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		Head hair easily falling out ¹⁾	8		
Eyestrain	12	Dry skin, getting rough and			
Dizzyness	8	chapped	14		
Calf cramps	10	Anomalies of the nails ²	8		
Oligomenorrhea, irregular		Disturbances of perception ³⁾	6		
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		
Getting motion sickness easily	5	Tendency toward edema, gastric		
Lightheadedness, dizziness	5	clapotage	15	
Syncope	5	Pleural effusion, cardiac water		
Watery nasal discharge	3	retention, ascites	15	
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

 $\textbf{Other:} \ common\ cold\ prevention,\ health\ maintenance,\ nocturnal$

enuresis