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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

Oriental Medicine and Nature

Oriental medicine was developed over 2000 years ago, when human beings were living their lives under greater influences of natural surroundings than those in the modern age. Those days were also the age when people began to construct megalopolises and the social surroundings began to have significant influences on people's minds and bodies; as a result diseases occurred and they were becoming therapeutic objectives. In other words, when you think of health and diseases, those ancient days were arguably the period in which people began to look for a balance between people's lives and nature and the way how the social environment should be. And then, the scale of urbanization began to expand at an accelerated speed. Human history is the history of overcoming nature's challenges and constantly destroying nature.

The environments of 2000 years ago generated oriental medicine. The original classic of oriental medicine *Suwen (Plain Questions)* includes the description of changes in the natural and social surroundings and of the thought toward the way how humans should be or live. Even though written 2000 years ago, this classic book points out the problems concerning the way how the people's lives should be in those days and how they set the frame of their minds, and explains ideal attitudes of their minds and desirable ways of people's living. The classic book further mentions that compared to the distant past, people has begun to lead their lives of a large scale separated far from nature, tend to become jealous of others, and exert themselves to succeed in life or satisfy their desires or ambitions –all these factors have brought people mental stresses, psychosomatic illness, autonomic dystonia, and other various disorders in return, which can only be relieved by the therapy of acupuncture, moxibustion or herbal decoctions; therefore, people should try not to satisfy their personal or social desire more than is necessary, avoid competing with others, and lead their lives by means of rising above the trivia of life and remaining calm and selfless.

As seen above, while the body and mind of an individual and the way the society should be are questioned in the classic book, a more important viewpoint about oriental medicine will be that it is the medicine deeply rooted in spontaneous remission or natural healing ability the human body has. Although such expression is usually used as cure by acupuncture and moxibustion, in effect the body that has been stimulated by acupuncture or moxibustion heals itself. It is not by acupuncture or by moxibustion that healing occurs. This is the point that makes a wide gap between oriental medicine and Western medicine in the way each medicine should be, theories and philosophy of each medicine. When both medicines are compared without giving consideration to the origin or construction of both medicines, opinions tend to be unilateral. In short, if the expression "medicine cures" is used plainly, it gives us a sense of a little bit hesitancy as oriental medicine is based on the notion that humans cure themselves. And if medicine does not cure, medical practitioners should be humbler towards the human body. They should assume an attitude of asking or speaking more to the body, like what kind of stimulation or treatment you want. Instead of the attitude of I will cure you, it may be good if there is such attitude that medical practitioners and patients follow together the processes to achieve cure. It will be the time for us to reconsider the relationship between illnesses, treatment, and to heal.

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Japanese Acupuncture - Current Research

Basic and Clinical Studies of Acupuncture and Moxibustion Treatment for Irritable Bowel Syndrome

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1. Introduction

In recent years, irritable bowel syndrome (IBS) has begun to be recognized as a common disease. The current prevalence of IBS is conceivably 14.2% of the general population of Japan, representing nearly 31% of outpatients of internal medicine. [1]

The pathogenesis of IBS has not been elucidated and no reasonable therapy and treatment are established. The abdominal symptoms that patients with IBS complain of are abdominal conditions accompanied by diarrhea or constipation. For IBS diagnosis the Rome III criteria are now adopted.

Although until now it has been thought that acupuncture and moxibustion can work well on these conditions, there is only insufficient evidence to support this. So, domestic and overseas studies on acupuncture and moxibustion relating to IBS will be presented below from both basic and clinical perspectives.

2. Basic Research on Acupuncture and Moxibustion Stimulations to Digestive Organs

Experimental medical research of acupuncture and moxibustion treatment for digestive tract has a long history in Japan and has been carried out from much earlier days than in other countries.

In 1912, Tojuro Kashida, et al. reported that they observed bowel peristalsis in house rats by visually inspecting the abdominal wall after causing bowel peristalsis by moxibustion stimulation and they also measured, with a manometer, changes in intra-abdominal pressures after an injection of Ringer's solution into the abdominal cavity to observe inhibitory responses followed by the transient increased motility elicited by moxibustion stimulation to the abdominal region and legs (ashi sanri).[2] In 1914, Michio Goto observed increased responses in house rabbits of the bowel motility elicited by moxibustion stimulation through visual and stethoscopic inspections of the abdominal wall.[3] And in 1929, Shuji Fujii visually observed changes in the motilities of the small intestine by making a small hole on the abdomen and reported inhibitory effects of infantile acupuncture.[4] However, these experiments were intended to find whether the gastrointestinal tract responds to acupuncture and moxibustion stimulations, and they were not referring to the mechanisms of acupuncture and moxibustion treatment.

At the 5th International Acupuncture Conference in 1978, Mori, et al. presented the report that gastric motilities in rabbits were observed by the balloon method by stimulating ashi sanri with the sparrow pecking (jyakutaku) technique, resulting in an increased intragastric pressure and disappearance of this response at the cut side of the sciatic nerve on the central side innervating ashi sanri.[5] Moreover, in 1991, Kudo, et al. reported the results of their observations in anesthetized dogs that the gastric electromyograms of the gastric smooth muscle showed delayed rhythms of gastric motilities and inhibited electrical activities in the gastric smooth muscle when electro-acupuncture stimulation was given to the tan-yu ketsu of the dorsal region.[6]

In 1993, Sato, et al. observed effects of acupuncture stimulation using similar methods as for basic research and verified that when the rotatory technique was applied to each region of the body, reflex inhibition occurred via the sympathetic nerves in the abdominal region as well as increased reflex motility via the vagus nerves in the four extremities.[7] (Fig.1)

Yamaguchi, et al. confirmed that the stimulation of electro-acupuncture, with which stable stimulations of various strength levels can be applied, produced inhibitory responses in the abdominal region and increased responses in the hindlimbs and recorded that afferent nerve activities were induced from the intercostals nerves by abdominal stimulation and those from the tibial nerves by hindlimb stimulation.

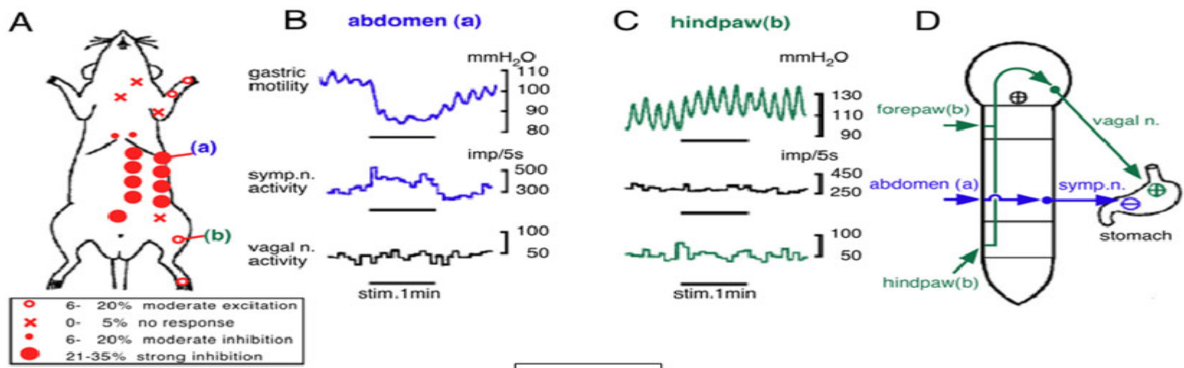

fig.1

(refer to the explanation of Fig. 1 on page 7)

And they further indicated that responses occurred from the threshold level at which C-fibers get excited when the abdominal stimulation was given and from the threshold level at which A- and C-fibers get excited when hindlimb stimulation was given, and as a result, the type of nerve fibers to transmit acupuncture stimulation differs between the trunk of the body and the hindlimbs. [8]

In regard to duodenal motility, Noguchi, et al. observed changes in the motility in anesthetized rats when electro-acupuncture stimulation was applied and reported that the motility was increased via the vagus nerves by the stimulation of hindlimb footpads and a segmental inhibition was induced in the spinal cord by abdominal stimulation.[9] (Fig.2)

In regard to research on the motility of small intestine, Iwa, et al. published their report in 1994, demonstrating acupuncture and moxibustion stimulations caused two-phase responses that acted as an enhancer or an inhibitor of the motility depending on a strained state of the small intestine. They reached this conclusion in the following procedures: Indian ink was orally administered to the stomach in unanesthetized mice and the transfer distance of the ink in the intestinal tract was observed; normally, the motility was increased by abdominal acupuncture stimulation, whereas it was suppressed by moxibustion stimulation; with the administration of Vagostigmin, which promote intestinal motility, abdominal acupuncture and moxibustion stimulations conversely

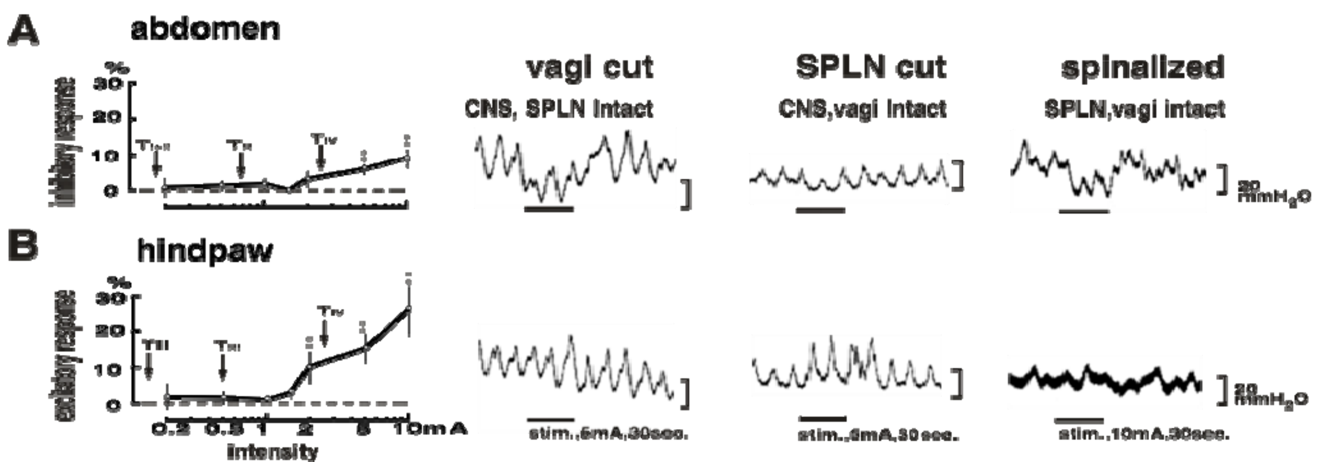

fig.2

(refer to the explanation of Fig. 2 on page 7)

turned to a inhibitory response; at the time of inhibition induced by atropine dosing, the increased response was produced; and when sympathetic nerves were stimulated by epinephrine to suppress the motility, no responses were observed – which means two-phase responses.[10] In 2006 Iwa, et al. further verified that electro-acupuncture stimulation to ST-36 (ashi sanri) in conscious rats significantly increased the motility of the distal large intestine via the pathway of the parasympathetic nerves and that its transfer pathway was mediated by parasympathetic sacral nerves.[11]

As just described, in recent years basic studies by many Japanese researchers help gradually elucidate the effects of acupuncture and moxibustion treatment on digestive organs and the mechanisms.

3. Present State of RCT for IBS in the U.S. and Europe and Clinical Studies in Japan

Searching IBS information on the Internet used in the world civilized societies reveals the actual IBS situation of the world. When IBS is Google searched with the keywords in English and Japanese, the websites retrieved domestically were 368,000 and 8,720,000 on overseas sites (as of January 2010). When compared with the year 2004, the retrieval increased to about 25 times domestically and about 31 times internationally. [12] (Fig.3)

However, when search was made with an addition of acupuncture (hari-chiryo in Japanese) to these keywords, Japanese sites increased to 24 times and overseas English sites increased only 3 times.

In the 2004 search, the number of English sites of IBS in English was 100 times more than Japanese IBS sites, suggesting a high expectation about acupuncture and moxibustion treatment in overseas countries. However, English sites now decreased drastically to nearly 15 times.

A survey, which might be rough, indicates that interest in acupuncture and moxibustion treatment for IBS was toned down in overseas countries.

It was in 1986 that an early literature on IBS with the title of “Alternative medicine consultations and remedies in patients with the irritable bowel syndrome” was published in the journal Gut in England, reporting the results of questionnaires surveyed among the subjects of patients with IBS, patients with organic supragastrointestinal disorders, and patients with Crohn’s disease. Herein, Smart, et al. pointed out that most cases of patients with IBS (16%) consulted practitioners of alternative medicine. [13]

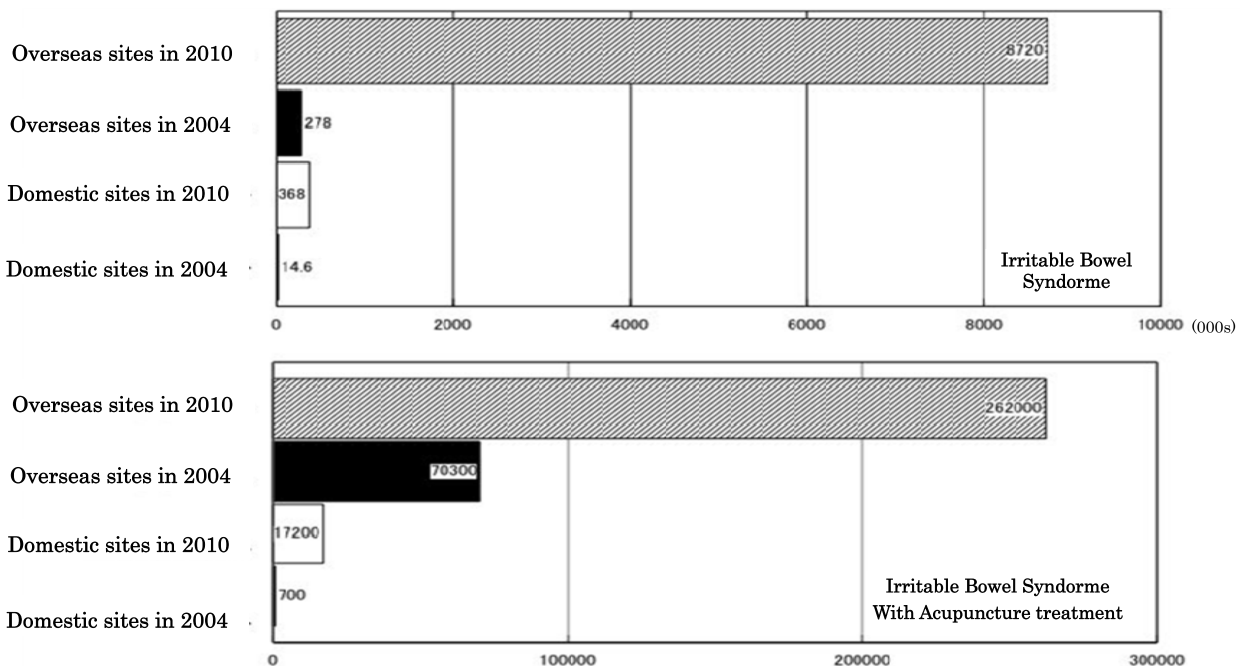

fig.3

(refer to the explanation of Fig. 3 on page 7)

This indicates that in these days, alternative medicine including acupuncture and moxibustion already began to be expected to treat IBS.

Subsequently in 1999, a rapidly increased number of IBS related literatures were published before and after the announcement of Rome II diagnostic criteria.[12] In conjunction with this, the number of literatures on IBS increased in the field of acupuncture and moxibustion. From 1999 to today, about 50 overseas literatures were retrieved on PubMed and many RCTs and systematic reviews were reported. (Tab.1)

Author	Date of publication	Type of experiment	Subjects	No. of cases	Results	Name of Journal
Lembo AJ	2009	RCT	IBS patients	230	In IBS procedures, clear evidence was not established to support significance of acupuncture compared to sham needle acupuncture.	Am J Gastroenterol
Lim B	2006	Meta Anna	6 RCTs	109	It is not assertive if acupuncture is 109 more effective than sham needle acupuncture in IBS procedures.	Cochrane Database Syst Rev
Schneider A	2006	Syst Rev	IBS patients	566	Acupuncture for IBS is mostly placebo responses.	Gut
Fireman Z	2001	RCT	IBS patients	25	Treatment results of the two groups of acupuncture and sham needle acupuncture showed acupuncture produced significant improvement in abdominal pain and systemic conditions, but no difference between the groups.	Digestion
Kunze M	1990	RCT	IBS patients	143	In comparing five types of treatment for IBS, successful rate of simple mental treatment was 75% against 31% of acupuncture treatment (sham needle acupuncture 17.2%).	Z Gesamte Inn Med.

Table 1: Major literatures on RCT's in the U.S. and Europe

Kunze reported in his 1990 RCT literature that the effect of acupuncture treatment was about 31% against 17% for sham needle acupuncture but did not exceed 75% for simple mental treatment.

In 2006, Schneider made systematic reviews of accumulated 566 cases and concluded that acupuncture effects were placebo effects.[14] Furthermore, the meta analysis[15] of 6 RCTs by Lim (2006), et al. and the RCT by Lembo (2009) showed no differences in effects between sham needle acupuncture and real acupuncture.[16]

The RCTs conducted up until today in the U.S. and Europe do not indicate that the use of acupuncture for IBS is effective, which might be a cause for the decreased number of IBS-related sites in English dominant countries, as above.

On the domestic site, although 26 IBS-related literatures can be retrieved, no RCTs are included and the literatures are mostly case reports and commentaries. This may be attributed to the legal status of practitioners engaged in acupuncture and moxibustion treatment: many professionals working on the clinical sites of acupuncture and moxibustion are not M.D. physicians, whose standing is likely to make it difficult to plan RCTs on acupuncture and moxibustion treatment for IBS.

In such condition, however, well-planned excellent case reports on acupuncture and moxibustion treatment for IBS have begun to be seen recently.

Matsumoto, et al. of Gifu University employed the reversal study design and studied clinical effects of acupuncture and moxibustion treatment in IBS patients who had 4 years of the disease duration and were resistant to medications. In 4 patients, points/regions to be treated were determined by “sho” and an acupuncture treatment period was alternated with a non-treatment period and during these periods abdominal pain, abdominal fullness, frequency of

defecation, stool condition, and psychological state (QOL) were observed with the results that abdominal pain, abdominal fullness, and QOL were improved in 3 out of 4 patients.[17] (Fig.4)

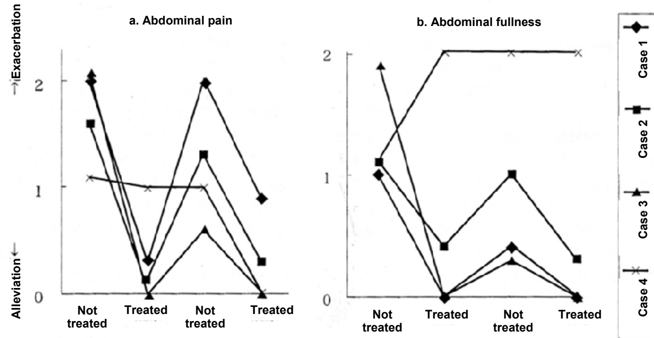

fig.4

(refer to the explanation of Fig. 4 on page 7)

While there are case reports showing effectiveness of acupuncture treatment as described above, there may be some reasons for difficulty detecting effective differences in stereotypically designed RCTs in which comparisons are made with sham needle acupuncture.

Complaints associated with IBS are diversified and the state of autonomic nerves in individuals may also be diversified. So, it is considered that effects cannot easily appear from experimental treatments added by stereotypical acupuncture stimulation. In uniform treatments, incompatibility exists between the state of patients and acupuncture treatment. So treatments with acupuncture and moxibustion will become effective when they are administered in response to the complaints and physical conditions of patients of the day.

Practitioners of acupuncture and moxibustion in Japan are placed in the situation where it is not easy for them to conduct RCTs. However, as a matter of course further detailed studies on IBS need to be conducted in the area of investigation for acupuncture and moxibustion and research approaches suited to the realities of our country must be sought.

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Legend

Fig. 1 Effect of acupuncture stimulation on gastric motility and its mechanism

A: Stimulated sites and rates of changes in gastric motilities B: Effect of abdominal acupuncture stimulation and activity of the autonomic nerves: Splanchnic nerves get excited (sympathetic) and gastric motility is decreased. C: Effect of hindlimb acupuncture stimulation and autonomic nerve activity: Vagal nerves get excited and gastric motility is increased.

D: Reactive mechanism

a: Abdominal acupuncture stimulation excites sympathetic nerves through the mediation of spinal reflexes. b: Hindlimb acupuncture stimulation excites vagus nerves through the mediation of supraspinal reflexes.

(Alterations/citations were made from the literature of 7 above.)

Fig.2 The effect of electro-acupuncture stimulation on duodenal motility and its mechanism

A: Abdomen and B: Intensity of electro-acupuncture stimulation to hindlimb footpads and the rates of changes in duodenal activity.

A Graph of Inhibitory Responses: The threshold of afferent intercostal nerve activity innervating the stimulated abdomen, the rate of changes in inhibition of duodenal motility. TI-IV arrows indicate the thresholds of afferent intercostals nerve activities of individual nerves.

Significant inhibitory responses appeared by stronger stimulation than the threshold of group IV fibers.

Inhibitory responses are not affected by a vagus nerve cut and spinal cord myelination but they disappear by a greater splanchnic nerve cut.

B Graph of Increased Responses: The threshold of afferent tibial nerve activity innervating stimulated hindlimb footpads and inhibitory rate of changes in duodenal motilities.

TII-IV arrows indicate the threshold of afferent tibial nerve activity for each nerve. Significant inhibitory response appeared when giving stronger stimulation than the high threshold group III or the excitatory threshold of the excitatory threshold group IV fibers.

Inhibitory responses disappeared by a vagus nerve cut and spinal cord myelination and are not affected by a greater splanchnic nerve cut.

(Alterations/citations were made from the literature (9) above.)

Fig.3 Changes in the number of IBS-related sites on the Internet

The graph above is the comparison of the number (‘000) of websites retrieved with the key word of “irritable bowel syndrome” between 2004 and 2010.

The graph below is the comparison of the number (‘000) of websites retrieved with the key word of “irritable bowel syndrome” +”acupuncture treatment” between 2004 and 2010.

Fig.4 Changes in Abdominal Symptoms in 4 Cases

A: Abdominal pain, b: Changes in Bloating Sensations. The axis of ordinate shows averages of points recorded in the diaries, the axis of abscissas shows time of the treatment period and the non-treatment period.

(Alterations and citations were made from the literature 17 above.

Kampo Medicine - Current Research

Kampo Medicine for Treatment of Recurrent Upper Respiratory Tract Infection in Children

Hiromichi Yasui
Japan Institute of TCM Research

Introduction

There are children who repeatedly suffer upper respiratory tract infections (recurrent otitis media, recurrent tonsillitis included) and frequently visit clinics. Every time children see pediatricians, they administer medicines for the treatment of infections. However, soon after this, children suffer infections again. The repeated episodes not only makes it difficult for children to lead ordinary lives but also make their parents spend quite a bit of time for the care of their children. This can increasingly cause mental and physical stresses in children and parents as well as a significant social loss. Now efforts are underway to make such children relatively become less susceptible to infections and, even if infected, to get them cured in a short time by means of long-term administration of Kampo medicines[1]. There are several prescriptions (not a single one) being used for the purposes, such as *saikokeishito*, *shosaikoto*, and *saikoseikanto*. Introduced hereunder are the results of a few studies in which these prescriptions were used.

Study using *saikokeishito*

Akiba el al. researched and studied on the effects of Extract of *saikokeishito* in 18 patients (male children 11, female children 7) aged from 11 months to 10 years with an average age of 5.5 years who developed cold-like symptoms six times or more during a year. They gave the patients oral administration of the Extract (0.1 - 0.25g/day) in one or two doses for the period of 4 to 12 months and studied the results, grouping effectiveness of the medicine into four categories: markedly effective for those who did not develop repeated cold-like symptoms during the administration period; effective for those who had a decrease in the onset frequency of cold-like symptoms; unchanged for those who did not show any improvement; and aggravation for those who had symptoms aggravated. The by-group breakdown was markedly effective in 4 patients (22%), effective in 12 (67%), and unchanged in 2 (11%), and there were no patients who showed aggravation. A parent questionnaire indicated a decrease in the onset frequency of fever and an improvement in poor appetite[2].

Koga et al. administered Extract of *saikokeishito* (0.15g/kg/day) for one year term to 26 children who repeatedly developed upper respiratory tract infections seven times or more during a year and observed progresses of their symptoms for two years after the discontinuation of the medicine to assess the effectiveness. They classified the effects of one year administration into four grades: effective for a decrease in the onset frequency of respiratory tract infections to 1/2 or less; and markedly effective for a decrease in the onset frequency to 1/3 or less. The breakdown of the rates shows markedly effective in 23.1%, effective in 57.7%, unchanged in 15.4%, and ineffective in 3.8%. Out of 15 patients in the group of effective, infectious susceptibility increased in 4 children after the discontinuation of the administration but it was evidently improved compared to that of pre-administration. And, in 11 patients out of 16 whom we could follow up, the erythrocyte sedimentation rate, which had often exceeded 20mm/hour one month after the recovery from infections, did not increase after the administration[3].

Mine performed the administration of *saikokeishito* (2 - 2.5g/day) for 2 to 4 months to 10 nursery school children aged from 1.1 to 1.10 years who repeatedly developed infections to compare the number of visits to physicians before and after the administration. He reported that the number of visits reduced to nearly 1/2 in one-half the patients

and to 1/3 or less in four patients. Although infections that children in this study were affected with before the administration of *saikokeishito* were of various types, the infections common to all the children were upper respiratory inflammation and bronchitis. Other infections of less occurrence in the subject children were otitis media and viral gastroenteritis (5/10 respectively), and the least one was urinary-tract infection (3/10)[4].

These studies show that the long-term administration of *saikokeishito* has effects on recurrent upper respiratory tract inflammation. The period of administration has not been established. Since these studies, however, indicate the onset of medicine effect appears within 3 months to 1 year, the administration period may be determined within the above time frame, depending on the patients' progress.

> *The reasons why *saikokeishito* is used to treat recurrent upper respiratory tract inflammation: *saikokeishito* is often used for children with weak constitution and those who repeatedly develop upper respiratory tract infections. Bupleurum root containing medicines are the prescriptions for supporting right and dispelling evil (reinforcing health and eliminating pathogens) that can treat both deficiency and excess at a time. *saikokeishito* can be used for people who lack physical strength and energy. Bupleurum root is a cool acrid exterior resolving medicinal that works with scutellaria root to dispel constantly invading evils and clears lung heat. Therefore, it can be used as a countermeasure to control recurrent infections of the initial stage. *Keishito* is a typical prescription for the harmonization of construction and defense, so that this decoction normalizes hyperhidrosis in children with weak constitution. This is also a prescription mainly used for the initial stage of a common cold in children with weak constitution. Furthermore, as this prescription does not irritate the spleen and the stomach, it is safe for use for children. In other words, *saikokeishito* is effective for the mechanism of lung-spleen qi deficiency →hyperhidrosis (weakened activity of preventing fluid leakage) →invasion of external evil (pathogen) (weakened defense activity) →repeatedly develop upper respiratory tract infection.

Study using *shosaikoto*

Saikokeishito is made by adding *keishito* to *shosaikoto* (to be precise, one-third of the components in these two prescriptions are blended.) On the basis of the belief that *shosaikoto*, although it does not contain *keishito*, has similar activities to those of *saikokeishito*, studies are undertaken using *shosaikoto*.

Iwama et al. performed the administration, for the period of 6 months to 2 years, of Extract of *shosaikoto* (0.1 - 0.14g/kg/day) to 13 patients aged from 1 to 13 years (male 6, female 7, an average age of 5.7 years) who developed upper respiratory tract infections 5 times or more during a year or within the last 2 to 6 months to find and study the number of the fever onset, general condition, and blood test values. Improvements began to appear 2 to 3 months after the commencement of the administration; infectious susceptibility became reduced in 10 patients and the fever onset frequency reduced to 1/2 - 1/3. Other improved symptoms were observed in appetite, complexion, and energy levels. In 1 patient who showed ineffectiveness, white fur attached to tonsilla and influenza bacilli were detected with high levels of CRP[5].

As Iwama et al. presumed, it was made clear that *shosaikoto* exerts effects very similar to those of *saikokeishito*. It may be considered that this result suggests that some relationship exists between the lesion at the location of lesser yang and recurrent upper respiratory tract inflammation.

Study using *saikoseikanto*

Saikoseikanto is not a prescription of “Shang Han Lun” but the one that is often used by Ikkando, a school of Kampo medicine, for weak constitution and atopic dermatitis. Clinical studies are undertaken on the presumption that this prescription has effects on recurrent upper respiratory tract inflammation.

Iwama et al. have published findings of their research in which they administered *saikoseikanto* to 12 infants (2 to 8 years old, female 5, male 7) who repeatedly had tonsillitis. Their findings on examining the infants’ tonsilla were that many of the subject infants fall under Mackenzie’s classification II Degree, half of them had white fur in crypts. Some days after the acute phase, they commenced and continued the oral administration of this medicine for one year. One month after the commencement of the administration, the onset of fever occurred in 8 infants but in 2 months the fever did not develop. The frequency of the onset of fever reduced to 3 times/year in 10 infants who had developed it every month during 2 to 5 months before the administration. Two infants were nonresponsive to the medicine, of which 1 infant had tonsillectomy[6).

This report also suggests that *saikoseikanto* has similar effects to those of above two prescriptions. *saikoseikansto*, which is of a complex composition, is made based on the principle different from that of Shang Han Lun. This fact shows that infectious susceptibility in infants has a variety of aspects. Elucidation of this will require challenges for the future.

Conclusion

A physiological characteristic of infants is vulnerability of the lung and spleen that control acquired qi. The children who repeatedly suffer infections are obviously marked by deficiency in the lung and spleen. Since spleen (earth/soil) is the mother of lung (metal), it can be considered that making spleen healthy makes lung healthy.

In traditional Chinese medicine, treatment approaches for such children are based on the principle of replenishing qi to strengthen the exterior and of construction-defense harmonization; for deficiency of protection qi (defense power of the exterior), *hochuekkito, gyokuheifusan*, *keishikaogito* or *ogikenchuto* is used for replenishing qi to strengthen the exterior; and *rokumigan* for the kidney that control acquired qi; and *maobushisaishinto*/ *shimbuto* for deficiency of yang qi.

Three types of prescriptions introduced here are the ones that have the activity of reinforcing health and eliminating pathogens rather than the activity of powerful supplementation/replenishment. All these prescriptions eliminate the evil in the location of lesser yang and have the activity of making triple energizers to function smoothly, and thus a long-term administration creates the internal environment that is able to prevent new evils from entering into the body. In some cases, it may be better to use the prescriptions for replenishing the lung and the spleen together. However, the result data currently available shows that the administration of those bupleurum root containing prescriptions produce sufficient effects, if it is continued for several months to nearly two years.

Preventing recurrent upper respiratory tract infections not only helps children to stay healthy but is of significance to kidney inflammation (IgA nephropathy or nephritis) and nephrotic syndrome that occur because the infections become a lesion.

The mechanism of preventive activity against these diseases must be clarified from the viewpoint of Western medicine. And in order to verify the

activity, there are many issues and questions to be solved, such as guidelines to be used. At the present stage, however, the use of those Kampo prescriptions allows to protect health of children and reduce medical costs and social losses. We consider that only for these benefits, Kampo treatment is worth doing.

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Clinical Report 1 (Japan)

Facility Introduction – Hyogo Prefectural Research Institute and Affiliated Clinic;
Effect of Acupuncture Treatment in Intractable Hiccups

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Facility Introduction

Hyogo Prefectural Research Institute and Affiliated Clinic

Following the intentions of the former governor of Hyogo Prefecture Tokitada Sakai pertaining to the "request clarification whether oriental medicine cannot be applied to health care and welfare for the residents of Hyogo prefecture" the Hyogo Prefectural Research Institute and Affiliated Clinic was established in 1977 as the first such public facility next to the Hyogo Prefectural Amagasaki Hospital.

Later, in connection with the application of health insurance to medical treatment using Kampo medicine, we started treatment in the department of oriental medicine established next to the Hyogo Prefectural Amagasaki Hospital. In the clinic affiliated with the research institute people receive approximately 10,000 acupuncture and moxibustion treatments annually. Since its establishment to the present day In this facility we have performed research and conducted treatment here for about 31 years related to both Kampo medicine as well as acupuncture and moxibustion treatment.

The Hyogo Prefectural Amagasaki Hospital is a general hospital that employs, including internees, 140 physicians, is visited by an average of 2,000 outpatients per day and has 500 beds. The patients included in the present study were inpatients for whom initially various other possible forms of treatment other than acupuncture and moxibustion were administered, but due to the failure to achieve any effects the physician in charge referred these patients to our department.

Introduction

"Singultus" (hiccup) is an involuntary spasm of the respiratory muscles, mainly the diaphragm. Hiccup is triggered by disorders of the brain stem controlling the contraction movements of the diaphragm, or stimulation of the peripheral phrenic or vagus nerves. Moreover, it can also be triggered by direct stimulation of the diaphragm. Generally employed treatments include drinking cold water, drinking a decoction of persimmon calyx, applying pressure to the eyeballs, or people notice after a while, that the symptom has been relieved. The condition mostly resolves spontaneously after a period varying between several minutes and several hours. However, there are also refractory forms of hiccup that tend to persist, occasionally for periods of more than several weeks. Hiccup persisting for more than 48 hours is called “refractory hiccup”. So far no treatment form has been established, but in case the “refractory hiccup” is caused by diseases of the central nervous system the administration of anticonvulsants, of if diseases of the digestive tract contribute to the etiology antiemetic drugs are frequently used. Yet, in some cases even the administration of these drugs has no effect on the hiccup and may make the treatment very difficult.

Generally, the number of patients with hiccup coming for acupuncture treatment is small. Actually, we treated in the clinic affiliated with our research institute over a 4-year period from 2005 only 10 patients with “refractory hiccup”, of which 8 had also been inpatients in the nearby Amagasaki Hospital. Protracted hiccup may lead to sleep disturbances and physical exhaustion, resulting in weight loss and the development of depressive conditions. In particular if patients in severe conditions are forced to be hospitalized, the wasting of physical strength due to the hiccup can develop into a life-threatening problem. Occasionally inpatients with hiccup can be in serious trouble because of their resistance to pharmacologic treatment and are then referred to acupuncture and moxibustion therapy. In this manuscript we introduce 3 inpatients and simultaneously present an outline of the acupuncture and moxibustion

treatment administered to 10 patients with refractory hiccup.

[Case No. 1]

[Name] Mr. B
[Age, sex] 52 years, male
[Occupation] employee
[Chief complaint] diarrhea, loss of appetite
[History] at age 37: cerebral infarct
[Allergy history] none
[Present illness]

- Starting in November (200B-1) gradual loss of appetite, development of a tendency towards diarrhea, passing 4-5 times per day small amounts of stool.
- Occasionally the stools were mixed with red, bloody fluid. Lower abdominal pain also occurred occasionally.
- Body weight: loss of 4 kg
- An irrigoscopy performed on March 1 of 200B showed a constriction and niveaux raised suspicion of colon cancer and led to the hospitalization of the patient on the same day.

[Diagnosis] rectal cancer (liver metastases), refractory hiccup (postsurgically)

[Acupuncture treatment]

PC6 (Naikan / Neiguan) and ST36 (Soku Sanri / Zusanli), depth of needle insertion: 3 mm, low frequency electrical stimulation at 2 Hz, duration of electrical stimulation: 20 min.

During the hospital stay one treatment per day, 5 per week.

[Clinical course]

March 1: Admission to the surgery ward

March 10: Low anterior resection of the rectal cancer to relief the ileus. Postsurgical development of refractory hiccup.

March 20: Start of acupuncture treatment for “refractory hiccup”. After the acupuncture treatment the hiccup stopped for half a day.

March 21: Second acupuncture treatment. After the acupuncture treatment the hiccup stopped for half a day.

March 22: Third acupuncture treatment. After the acupuncture treatment the hiccup stopped for half a day.

March 23: Fourth acupuncture treatment. After the acupuncture treatment the hiccup stopped completely.

March 24 to 31: Fifth to tenth acupuncture treatment. Hiccup (-)

April 2: Discharge. Switch to treatment as an outpatient at the research department for oriental medicine. Hiccup (-)

April 6: Eleventh acupuncture treatment. Hiccup (-)

April 12: PET examination showed areas of high uptake in the liver and porta hepatits. Elsewhere metastases were not observed.

April 26: Twelfth acupuncture treatment. Hiccup (-)

May 2: Thirteenth acupuncture treatment. Hiccup (-). Acupuncture treatment discontinued. Initiation of arterial injection of the anticancer agent 5FU.

[Results of the acupuncture treatment]

In this patient the refractory hiccup developed following resection of a rectal cancer. In the presence of multiple liver metastases the application of drugs that might put a strain on the liver was avoided as far as possible. When the physician in charge was struggling to find a treatment for the persistent hiccup he learned about the possible effectiveness of acupuncture treatment and referred the patient the research department for oriental medicine. From the surgery on March 10 until the patient was introduced to acupuncture treatment the hiccup continued day and night over a period of 10 days, but after the first acupuncture treatment stopped at least for half a day. After four treatment sessions the hiccup stopped completely and did not recur later.

[Case No. 2]

[Name] Mr. G
[Age, sex] 73 years, male
[Occupation] guard

[Chief complaint] rotatory vertigo

[History] TBC at the age of 20. Hypertension

[Present illness] On December 11 200G an attack of rotatory vertigo led to difficulties in walking.

Consultation as an emergency outpatient at the Amagasaki Hospital at 9 am of the same day. Consciousness was clear. CT findings raised suspicions of cerebellar infarction.

Admission on the same day

[CT findings on the day of the admission]

Demonstration of a cerebellar infarction over a wide area of the right cerebellar hemisphere. Condition of the brain stem could not be evaluated.

[Diagnosis] cerebellar infarction, refractory hiccup (postsurgically)

[Acupuncture treatment]

PC6 (Naikan / Neiguan) and ST36 (Soku Sanri / Zusanli), depth of needle insertion 3 mm, low frequency electrical stimulation at 2 Hz, duration of electrical stimulation: 20-30 min.

During the hospital stay one treatment per day, 5 per week.

[Clinical course]

December 11: Admission to the ward of the neurosurgery department

The observation of a sudden arrest of respiration and drop in blood pressure suggested the possibility of a lesion involving the brain stem. Connection to a respirator due to hypoxia.

December 13: Consciousness: JCS II-2.

December 14: The CT showed low density areas (LDA) in the left cerebellar hemisphere, while LDAs of the brain stem were indistinct. Ventricular distention, development hydrocephalus. For the hydrocephalus a decompression through suboccipital craniotomy was performed and the ventricles drained. Postsurgical development of hiccup. Consciousness: JCS II-2.

December 17: Drinking of cold water and compression of the eye balls was tried as treatment for the hiccup, but did not stop it.

Consciousness: JCS II-3.

December 19: Begin of acupuncture treatment for the refractory hiccup. Following the treatment the hiccup stopped for 3 to 4 hours.

Consciousness: JCS II-3.

December 20: Second acupuncture treatment. Following the treatment the hiccup stopped for 3 to 4 hours.

At night, the GABA receptor agonist Baclofen was administered.

December 21: Third acupuncture treatment. Following the treatment the hiccup stopped and did not recur later. Consciousness: JCS II-3.

December 25: The hiccup had not recurred since the last treatment on December 21. Today the acupuncture treatment was discontinued.

(200G + 1) On January 4 apnea developed, so that for the purpose of assistive respiration the use of a continuous positive airway pressure (CPAP) apparatus was started.

January 8: A "central alveolar hypoventilation syndrome" was newly diagnosed. Consciousness: JCS II-3.

January 15: The patient was again referred from the neurosurgery department. The purpose this time was improvement of the central alveolar hypoventilation.

February 5: SPO_2 (percutaneous arterial oxygen saturation) had reached a good and stable level. Later the patient was transferred to a different hospital.

[Results of the acupuncture treatment]

This is a case, in which cerebellar infarction led to the development of hydrocephalus. When a suboccipital craniotomy was performed for the decompression of the hydrocephalus “refractory hiccup” developed unexpectedly and put the attending physician at a loss regarding its treatment. This attending physician heard from other physicians, that acupuncture treatment may be effective for “refractory hiccup” and thus referred

the patient to the research department for oriental medicine. Over a period of 6 days following surgery and until the start of the acupuncture treatment the hiccup had continued constantly, but after both the first and second treatment session stopped for a period of 3 to 4 hours. Conceivably the function of inhibitory mechanisms for hiccup may have been impaired due to the brain stem lesion. Therefore we suggested on the day of the second acupuncture treatment to the attending physician to administer drugs activating inhibitory systems descending from the brain stem. In that same night Baclofen was prescribed[1]. The synergistic effects of the acupuncture treatment and Baclofen stopped the hiccup on the day of the third acupuncture treatment. On the day of the third acupuncture treatment the refractory hiccup was cured and the treatment therefore discontinued. No recurrences of the hiccup occurred later.

[Case No. 3]

[Name] Mr. J

[Age, sex] 70 years, male

[Occupation] scaffolding man (construction worker)

[Chief complaint] headache, feeling of weakness, dark orange colored urine

[History] hypertension

On December 16 (200J-1) left-sided sudden deafness

On December 23 (200J-1) lacunar infarction (no paralysis)

[Allergy history] none

[Smoking/drinking] Smoking:30 cigarettes /day x 50 years
Drinking: ca. 0.36 /day

[Family history] no appreciable disease

[Present illness] Since 2 months earlier development of headache and weariness. Since 2 two weeks earlier passing of dark orange colored urine. While blood tests performed in a different hospital on December 16 showed BUN: 24, Cr: 1.51, similar tests performed today (200J, February 3) showed BUN: 69.8, Cr: 7.55 and thus led to an emergency referral visit.

Today: emergency hospital admission

[Diagnosis] necrotizing crescentic glomerulonephritis, refractory hiccup (side effect of a steroid pulse therapy)

[Acupuncture therapy]

PC6 (Naikan / Neiguan) and ST36 (Soku Sanri / Zusanli), depth of needle insertion 3 mm, low frequency electrical stimulation at 2 Hz, duration of electrical stimulation: 20 min.

During the hospital stay one treatment per day, 5 per week.

[Clinical course]

February 3: Admission of behalf of the department of nephrology.

February 5: Performance of a kidney biopsy. Electronmicroscopic examination.

February 10: Initiation of a steroid pulse therapy for three days.

February 11: The hiccup started on the second day of the steroid drip infusion.

February 12: Initiation of dialysis. Hiccup did not stop since the day before. Administration of Metoclopramide for the treatment of the hiccup remained without effect.

February 13: Request of acupuncture treatment for "refractory hiccup". Hiccup stopped during the acupuncture treatment.

February 14: Kidney dialysis. No hiccup (-) since the day before. Today the acupuncture treatment is discontinued.

February 15: No hiccup (-)

February 16/18: Kidney dialysis.

February 20: The second 3-day steroid pulse therapy begins. Kidney dialysis.

February 22: Hiccup starts on the third day of the steroid drip infusion. The steroid pulse therapy leads to an improvement of the kidney function. Later, kidney dialysis is discontinued.

February 23: The hiccup continues since the day before. Acupuncture treatment is requested again. Hiccup stops during the acupuncture treatment.

February 24: No hiccup (-) since the acupuncture treatment on the day before. Today the acupuncture treatment is discontinued.
February 25/26: No hiccup (-)
March 25: Cr value has improved to 4.3. Today: discharge.

[Results of the acupuncture treatment]

This is a case, in which the hiccup recurred. The initial occurrence of the hiccup and its later recurrence have in common, that both instances occurred during the steroid drip infusion. Nausea, heartburn and hiccup are listed as adverse effects of the steroid pulse therapy on the digestive organs. After the second steroid pulse therapy this treatment form was not repeated and there were no further recurrences of the hiccup. This suggests that in this patient the refractory hiccup may conceivably have been a drug induced hiccup[2]. The hiccup in this patient did not respond to the administration of the antiemetic drug Metoclopramide, but during the electrical stimulation of the needles applied during the acupuncture treatment an immediate response was observed and the hiccup stopped. Both during the initial occurrence and the recurrence of the hiccup a single electroacupuncture treatment led to the cessation of the hiccup.

[Therapeutic results of the treatment of 10 patients with refractory hiccup]

As described in Table, we used acupuncture to treat over a 4-year period from 2005, 9 men and one women with refractory hiccup. Diseases of the digestive tract were the most frequent causative disorder and had been responsible for the hiccup in 6 patients, among which it developed in 5 patients following surgery for cancers of digestive organs. This incidence was followed in frequency by 3 patients with cerebral stroke. Apart from diseases of the digestive organs and cerebrovascular disorders refractory hiccup developed in one patient as a side effect of steroid pulse therapy.

Except for patient B, who had impaired liver functions, Metoclopramide was administered, but had no effect on the hiccup. Moreover, attempts of drinking cold water or compressing the eyeballs also failed to stop the hiccup. Attempts at using electroacupuncture treatment for these 10 patients with refractory hiccup caused the cessation of the hiccup in all patients. The number of treatment sessions until the hiccup stopped was in patients, in whom the effect appeared quickly, just one treatment and required in patients with a slow response 5 sessions of electroacupuncture treatment. The hiccup recurred in the three patients H / I / J. In patient H aspiration occurred after a cerebral infarction. Aspiration during the drinking of alcohol invariably leads to the occurrence of hiccup and once this has started may continue for 3 to 7 days. During this last half year the number of days without hiccup were for this patient rather few in number. Since he started to visit the clinic affiliated with our research institute as an outpatient and received electroacupuncture treatment the hiccup stopped.

As described under [Case No. 3] the hiccup in patient J was caused by a steroid pulse therapy. Both the initial occurrence and the recurrence of the hiccup were cured by just one electroacupuncture treatment. In patient I the initial occurrence of hiccup developed following the surgical resection of a rectal cancer and was alleviated after 3 electroacupuncture treatments. The recurrence of the hiccup occurred immediately after a rupture of the abdominal wall required emergency surgical intervention on the twelfth day after the initial surgical resection of a rectal cancer. The hiccup in this case proved to be rather unresponsive to the treatment and required a total of 11 electroacupuncture treatments.

All patients except patient G, who suffered from disturbances of the consciousness, experienced the acupuncture treatment as "comfortable" (pleasant).

Discussion

Hiccup is an involuntary spasm of the

respiratory muscles, mainly the diaphragm. The reflex arch for the hiccup uses the afferent pathways of the phrenic and vagal nerves originating from the esophagus, stomach and diaphragm, while the phrenic and vagal nerves descending towards the respiratory muscle groups and diaphragm serve as efferent pathways. Also, there appears to be a still unidentified singultus center in the brain stem[1)]. Usually areas in the parietal lobe, hypothalamus and the reticular activating system of the medulla act to inhibit descending singultus activities[1)]. The frequent occurrence of hiccup in newborn is presumably due to the immaturity of these inhibitory function[2)].

A possible cause of hiccup is a weakening of the inhibition exerted from higher brain levels on the singultus reflex arch, stimulation of the neural pathways of that singultus reflex arch, or else direct stimulation of the diaphragm. Among the central nervous systems cerebral infarction, cerebral hemorrhage, brain tumors and similar disorders resulting in disturbances of the brain stem may be a cause of hiccup. Lesions in the thoracic or abdominal cavities may also result in stimulation of afferent and efferent pathways of the singultus reflex arch or the diaphragm. In particular cancer of the digestive organs or ablative surgeries are likely to result in hiccup[2)].

Metoclopramide is used as an antiemetic for the treatment of hiccup caused by diseases of the digestive tract. A side effect of Metoclopramide is blockage of the D2 receptors located on parasympathetic nerves, leading to an augmentation of the motility of the digestive tract. Here Metoclopramide is administered in the hope, that it will alleviate the hiccup through a reduction of the digestive tract motility[1)]. For hiccup caused by diseases of the central nervous system the GABA receptor agonist Baclofen is frequently administered. The relevant mechanism of action here is considered to be an inhibition of the efferent portion of the singultus reflex arch[1)]. Moreover, Baclofen acts also on the brain stem and activates inhibitory systems for descending pain pathways. Needle stimulation of St36 (Soku Sanri, Zusanli) and other points on the legs and arms is known to promote the motility of the digestive tract through enhanced parasympathetic dominance[3,4)]. PC6 (Naikan / Neiguan) reportedly has both antiemetic effects and activates inhibition of descending pain pathways via endogenous opioids[5)]. Thus, while the mode of action of Soku Sanri and Naikan differs slightly from those mediating the effects of Metoclopramide or Baclofen, we chose these two acupoints for the treatment of drug-resistant, refractory hiccup, because the results are similar.

Based on clinical experiences gained over a 4-year period since 2005 from the treatment of 10 patients with drug-resistant, refractory hiccup, we found electroacupuncture stimulation at 2 Hz of Soku Sanri and Naikan useful. The mechanisms of their effectivity has not been established, but Soku Sanri and Naikan apparently act to promote the motility of the digestive tract and conceivably have inhibitory effects on the singultus reflex arch as well. Moreover, experiencing the acupuncture treatment as "comfortable" (pleasant) by the patients may also be considered an important factor contributing to the cure of hiccup.

Conclusion

Electroacupuncture stimulation at 2 Hz of Soku Sanri and Naikan is considered to be useful for drug-resistant, refractory hiccup.

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Results of acupuncture treatment for refractory hiccup

	Name	Age	Disease	Cause of the hiccup	Day of treatment begin; Duration of the hiccup until start of acupuncture treatment	Number of acupuncture treatments until the cure of the hiccup	Number of acupuncture treatments	Outcome
A year, May 8 Admission to surgery ward	A	57	Rectal cancer, terminal stage (systemic metastases)	Not recorded	June 8 5 days	2	3	June 13 Death
B year, February 24 Admission to surgery ward	B	52	Rectal cancer (liver metastases)	Development following resection of rectal cancer	March 20 10 days	4	13	December 28 Discharge
C year, December 21 Oriental medicine ambulance	C Female	30	Reflux esophagitis (since 2 years) Aerophagia (since 2 years)	Not recorded	December 21 1 month	1	3	Next January 18 Discontinued
D year April 23 Admission to digestive surgery ward	D	64	Esophageal cancer	Development following resection of esophageal cancer	July 9 3 days	5	5	July 31 Discharge
E year, September 14 Admission to the neurology ward	E	68	Cerebral infarction	Not recorded	September 27 7 days	1	3	October 18 Transferred
F year, August 18 Admission to surgery ward	F	67	Gastric cancer	Occurred after surgery	December 5 3 days	4	5	December 16 Discharge
G year, December 11 Admission to neurosurgery ward	G	73	Cerebral infarction 3 days later ventricular distention hydrocephalus	Development after cerebral decompression	December 19 2 days	3	3	Next February 5 Transferred
H year, April 18 Oriental medicine ambulance	H	66	Cerebral infarction (previous year on November 20) Aspiration (previous year October)	Occurs upon aspiration induced intensive choking	April 18 6 months Stopped occasionally for 1-2 days	2 1 1	15	In July: based on suspicion of hemorrhage into multiple organs the attending physician ordered to discontinue treatment
I year, January 29 Admission to surgery ward	I	70	Rectal cancer	① Following rectal cancer resection ② After resurgery following abdominal wall rupture	① February 9 8 days ② February 17 1 day	① 3 ② 11	① 3 ② 11	April 3 Discharge
J year, February 3 Admission to nephrologic ward	J	70	Glomerular nephritis	After steroid pulse therapy	① February 13 3 days ② February 22 2 days	① 1 ② 1	① 1 ② 1	March 25 Discharge

Over a 4-year period since 2005 we treated 10 patients with drug-resistant, refractory hiccup with acupuncture. These patients included 9 men and one woman. Recurrences were observed in the patients H / I / J.

Clinical Report 2

One Case that Showed Seihaito was Effective in Wet-type Bronchiectasis

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Case: Female of 68 years old
Initial consultation: May 20, X-year
Chief Complaint: Cough and phlegm
Present history: Received thyroid tumorectomy in November 1999. Soon after the operation, cough and phlegm began to develop. The color of phlegm is sometimes white and sometimes yellow. Large amounts of phlegm are raised in the morning on rising. Coughing continues until phlegm has completely been eliminated. The patient always coughs to clear her throat. When phlegm does not come out, she has difficulty breathing. She had chest X-Ps and CT examinations at a certain university hospital and was diagnosed as having bronchiectasis.

Appetite: Good
Sleep: Ordinary
Bowel movement: Twice a day, normal stools
Urination frequency: Eight times a day

Past history: Thyroid tumor
Present conditions: Height 145cm and weight 52.5kg

A stethoscopic examination revealed no anomalies.

Blood pressure: 160/82mmHg
Pulse condition: Deep and slippery
Tongue sho: Pale dark color, thin white fur, wet
Abdominal sho: No special mention
Her mouth becomes dry. Her lips become rough.

Findings on examination: A CT examination was performed on April 17 of this year.

Cord-like shadows (atelectatic lung) on the middle lobe of right lung and lingular segment of left lung, and a ground glass like shadow on diaphragm under inferior lobes of both lungs, and mild bronchiectasis (no change from December 10, X-5 year)

Diagnosis: Phlegm-heat stagnancy in the lung
Prescription: Lung-Clearing Decoction
Course: With two weeks administration, the incidence of cough and phlegm expectoration was substantially reduced. After five weeks, the amount of phlegm in the morning on rising was extremely reduced. After eight weeks, the cough subsided mostly and no phlegm was raised. Subsequently, the conditions were being maintained till January X+1 year, when the patient caught a cold and had a cough and phlegm expectoration, which lasted for four to five days. Subsequently, she has been in stable conditions without even catching a cold. The medication was discontinued in June X+1 year. Since then, the conditions have not been aggravated.

Consideration:

Since the main symptoms of the wet type of bronchiectasis are cough and expectoration of phlegm, in traditional Chinese medicine, an approach to both phlegm and excessive fluid is required. In terms of cough, there are two types - cough caused by external affections and cough caused by internal injury. The latter is further classified into the subtype in which phlegm and heat obstruct the lung, to which the patient belongs. The textbook mentions another basic prescription. *seihaito*, which has a similar composition to that appearing in the text book, is often used in Japan and many cases have been reported.

The characteristic of this case is white or yellow phlegm in fairly large amounts. Large amounts of phlegm indicate the presence of phlegm-damp whereas yellow phlegm indicates that it is accompanied by heat. When phlegm does not come out and eliminated, breathing trouble occurs because phlegm obstructs clearing the lung. Dry mouth develops when the heat is burning fluids in the lung.

Although symptoms other than phlegm-heat were not observed in the patient, the clinical condition

was diagnosed, based on the phlegm characters, as phlegm and heat obstructing the lung. So, Lung-Clearing Decoction was used for eliminating the phlegm and clearing the lung. The prescription is composed of the following:

seihaito (in "Wan Bing Hui Chun"1857)

Scutellariae Radix 2g
Gardeniae Fructus 2g
Mori Cortex 2g
Fritillariae Bulbus 2 g
Platycodi Radix 2g
Armeniacae Semen 2g
Ziziphi Fructus 2g
Bambusae Caulis 2g
Citri Unshiu Pericarpium 2g
Zingiberis Rhizoma Processum 1g
Poria 3g
Angelicae Acutilobae Radix 3g
Asparagi Radix 2g
Ophiopogonis Radix 3g
Schisandrae Fructus 1g
Glycyrrhizae Radix 1g

Clinical Report 3

Erythema-palmare in Children

Zen'ichiro Watanabe
Yamanashi Nikoniko Clinic

Case: Female infant of 2 years old
Chief complaint: Rash on the Palms (erythema palmares)
Present illness: Visited our clinic because a rash began to develop on palms five weeks ago, which seemed very itchy, and also because the prescription of *sammotsuogonto*, which was being administered, did not improve the condition.
Past history: Received the treatment of infantile facial dermatitis (4 months old) at our clinic.
Oriental medical finding:
Objective signs: Erythema (with an itchy sensation) was observed on the palms and plantar parts. Redness on the cheeks was also observed. Intense bad breath. Tongue is slightly red with white furs. No abnormalities were found in the pulse count and the abdomen which was soft.
Subjective-symptoms: Tend to be prone to constipation. Frequent urination and tend to eat excessively (especially hot snacks).
Diagnosis: Clinical condition was considered that excessive eating inflamed the qi of stomach causing heat stagnancy in palms, plantar and cheek.
Therapy 1: *byakkaninjinto* (for stomach heat) + *shigyakusan* (for promoting the circulation of qi and blood)
Course 1: To the 7th day since the administration of the medicine, palmar-plantar erythema was progressive and no improvement was made in the bowel movement.
Therapy 2: *byakkaninjinto* + *daisaikoto* (for interior heat)
Course 2: At the consultation on the 10th day, the plantar parts were still reddened with blisters. Red cheeks and palms, however, were relieved and desquamation was observed. Bowel movements became normal. Subsequently, erythema disappeared.

Discussion: Palmar erythema is a reddening of the skin due to capillary dilation. It occurs with infections, allergies, Kawasaki disease, liver diseases (increased levels of blood estrogen), connective tissue diseases (lupus erythematosus, dermatomyositis, rheumatoid arthritis), and chronic lung diseases. There are rare case of inheritance. In infants, erythema is thought to be associated with Epstein-Barr (EB) virus or cold-chill stimulations. However, differentiation must be made whether the disorder is palmar-plantar erythema popular dermatitis (sand rash-like skin irritation), trichophytosis, contact dermatitis, atopic dermatitis, or pompholyx. In the daily medical practice, there are many patients with palmar erythema although they do not have underlying diseases.

Palmar erythema is treated with ointments such as steroids with little effect. Physicians can only provide guidance to the patients "always keep your hands clean, and wash your hands frequently."

In Kampo medicine, the clinical state is considered as blood stagnation and such medicines as *tokishigyakukagoshuyushokyoto*, *keishibukuryogan*, *tokakujokito*, *tokishakuyakusan* are often used. For targeting the elimination of a warm sensation in the hands and feet, *sammotsuogonto* is often used.

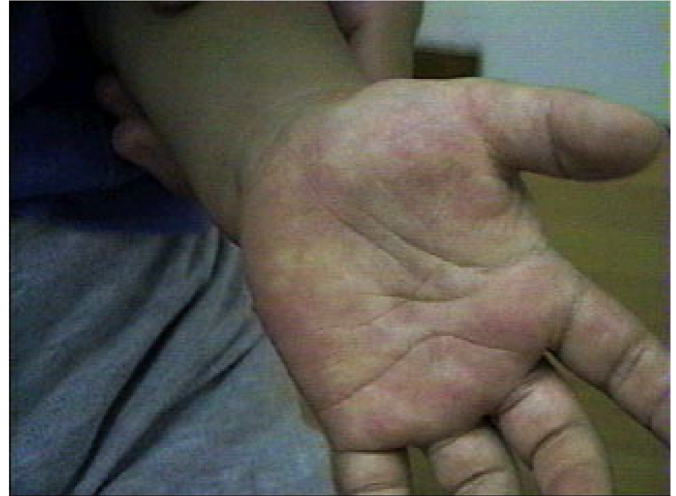
The author considers that in the case of the patient, the circulation of qi and blood in the palms and plantar parts (from which there is a greater flow of blood, but a less flow of blood returns) to capillary vessels in the distal portions of four extremities become stagnant, causing heat stagnancy. For heat stagnancy in the capillary vessels, *sammotsuogonto* is usually effective. However, for palmar erythema caused by stomach heat (hyperactivity of stomach qi) like in the patient, the combined administration of the following is effective: *byakkokaninjinto*, which has the action of clearing stomach heat, and *shigyakusan* or *daisaikoto*, which contains both white peony root and citrus aurantium (immature bitter orange) to enable the circulation to return the stagnant qi and

blood stasis. (From Dr. Ebe's Classical Formulation Theory)

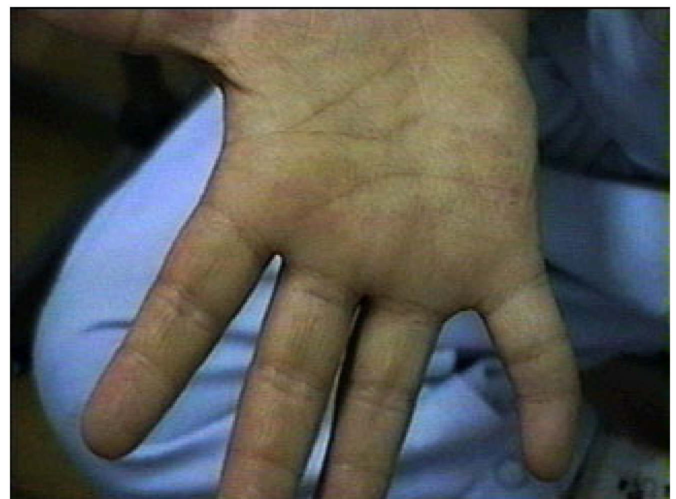
In the study of other eight cases of infantile palmar erythema (from 1 year old to 2.9 years), it was found that the initiation of excessive eating are mostly linked to the completion of weaning diet, holiday periods, and festivals. Their skin rash starts to develop from the sides of the hands and feet and the reddening spreads to palms and planter parts with the occasional formation of blisters accompanied by an itchy sensation. During the period of deflorescence, the skin may often desquamate.

The clinical conditions of these cases are considered that heat is stagnant at the palms and plantar due to hyperactivity of the stomach qi and overeating, so that naturally examinations reveal no abnormalities and physicians observe that the infants are cheerful and energetic.

Before treatment



After treatment



Kampo Dermatology – Clinical Studies

Treatment of Rosacea-like Dermatitis with Kampo (2)

Fumino Ninomiya
Aoki Clinic

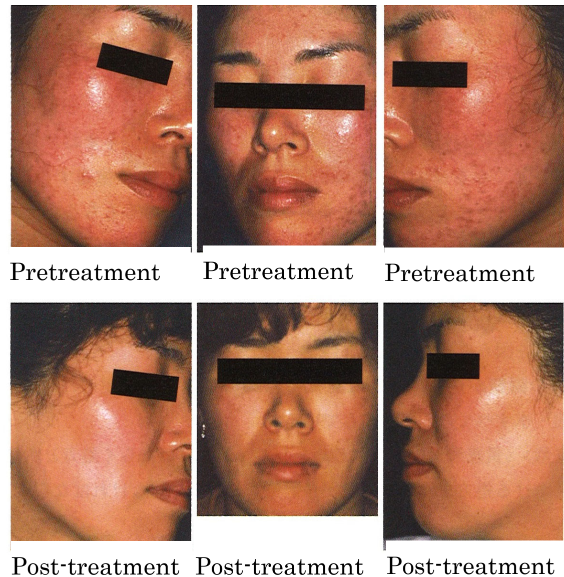
The noses of habitual or heavy drinkers are red and people generally call the red nose drinkers nose. The name Rosacea-like dermatitis is used because there are apparently similar conditions between this dermatitis and so-called red nose. As the cases in this report clearly show, rosacea-like dermatitis is a skin disorder that results in red patches of erythema and eruptions that develop on the face. And capillary dilation, which is referred to as sairaku in Kampo medicine - a somatic condition often caused by blood stasis - is observed in most of the patients. It is this stasis that causes the skin to become reddish.

Usually dermatologists continuously prescribe steroids, together with vitamins B2 and B6, and other medicines such as antihistamines. These medicines can suppress red patches and itchy feeling, causing a great damage to immunity in return. If this happens, the regulation of blood vessels does not function properly, inducing the dilation of capillaries, resulting in aggravation of red patches; then this vicious cycle starts. Applied steroids get into the body and weaken the vital power. Furthermore, oxidized residues of steroids accumulate on the skin surface, causing further aggravation.

We must explore the real cause of the disease and the process of becoming capillary dilation, and then administer fundamental treatment. Importantly we must have the courage to provide steroid-free medication.

The cause of the poor regulation of blood vessels is associated with reversed flow of qi and cold feet; that is, problems in qi, blood and fluid are all involved. Therefore, prescriptions for acting on the exterior and/or the interior should be used depending on the conditions, such as *shigyakusan* and *orengedokuto*.

Case 1: Female of 40 years old
Present illness: Skin inflammation developed at the age of 13. Rosacea-like dermatitis also developed. Steroids had been used for each incidence. Symptoms changed with menstruation.
Present condition: Steroid-aggravated rosacea-like dermatitis. Prone to have diarrhea with cold feet (+), facial flushing (+), and stiff shoulders.

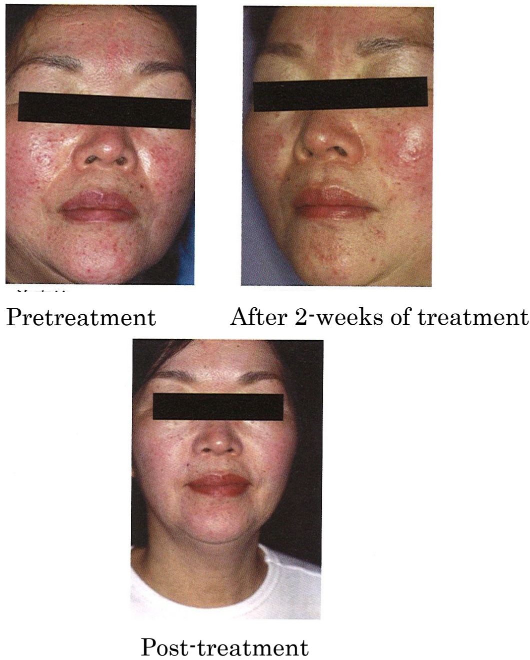


Pretreatment Pretreatment Pretreatment

Post-treatment Post-treatment Post-treatment

Treatment and course: It was cured almost by administrating of *tokishakuyakusan* 5.0g and *orengedokuto* 2.5g for 14 days.

Case 2: Female of 57 years old
Present illness: Developed two years ago. At a previous clinic, steroids for seborrheic dermatitis were given. The symptoms were slowly progressive.
Present condition: Marked red patches of erythema and acne-like rash/eruptions. Abdominal pain.
Blood pressure 110/65, cold feet (+), and drying of the throat (+).
UV test – till 20 seconds (-), and no abnormalities in peripheral blood.
Treatment and course:
shishihakuhito 4.0g and *shigyakusan* 2.5g were administered for 14 days. The condition improved as a whole.
maobushisaishinto 5.0g and *shigyakusan* 2.5g were administered for14 days. Healing was observed.



Pretreatment After 2-weeks of treatment

Post-treatment

Case 3: Female of 52 years old

Present illness: Red patches developed on the face 5 years ago, when the patient moved to Shizuoka from Akita.

The patient's previous physician administered various medicines such as *byakkokaninjinto* 6.0g, Allegion, Placenta (for external application), Kindavate, Azunol, *unseiin* 7.5g, *keishibukuryogan* 7.5g, and *maobushisaishinto* 5.0g.

Present condition: Red patches and blood stasis of capillary vessels on the both cheeks with a mix of eruptions. Sweaty palms, hands, feet and armpits (+). Became worse after stress loading. Irregular menstruation. Sensitive to cold (+). Insomnia and psychoneurosis.

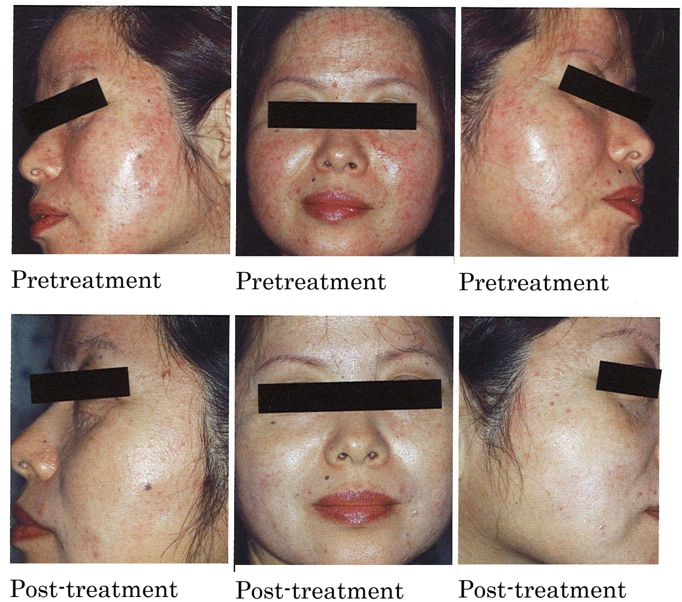
Abdominal sho: Epigastric oppression, palpitations above the umbilicus, pain in the right rectus abdominis muscle.

Tongue sho: Swollen, moist, teeth marks, and peeling of white furs

Treatment and course:

shishihakuhito 4.0g, *keishikaryukotsuboreito* 5.0g, and saffron (*Crocus sativus*) 0.5g were administered for 14 days. The condition substantially improved.

Kamishoyosan 5.0g, *orengedokuto* 2.5g, and saffron 0.5g were administered for 14 days. Since the course was favorable, the administration continues.



Pretreatment Pretreatment Pretreatment

Post-treatment Post-treatment Post-treatment

Case 4: Female of 59 years old

Present illness: Facial red patches developed 6 years ago. Although the patient received various treatments at the previous clinic, using various types of steroid ointments, no cure was achieved.

Present illness: Marked facial red patches. Due to constipation, habitually use of senna, and rhubarb.

Abdominal distension (+), constipation (+), and stiff shoulders (+). Difficulty getting to sleep and waking up in the morning. Wake in the middle of the night (+). UV test up to 10 seconds (-).

Abdominal sho: Palpitations above the ambilicus (+), palpitations above the ambilicus. Pain beside the left umbilicus toward the lower leg.

Examinations: Blood test; TC 245mg/dl LDH 247Iu/dl

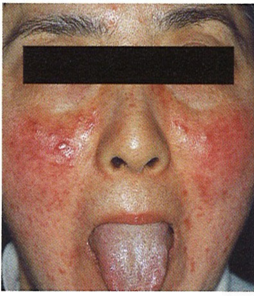
Allergen: Cedar (++++), ticks (++), HD (house dust) (++)

Treatment and course:

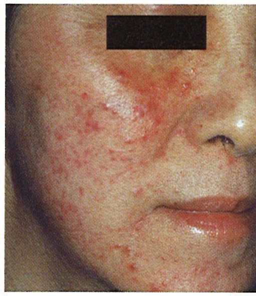
shishihakuhito 4.0g were administered for 14 days.

orengedokuto 5.0g and *tokakujokito* 5.0g were administered for 6 weeks.

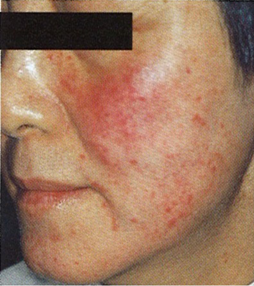
The effects of these medicines appeared immediately and red patches of erythema disappeared. Difficulty sleeping and waking up in the morning improved. Constipation and stiff shoulders resolved.



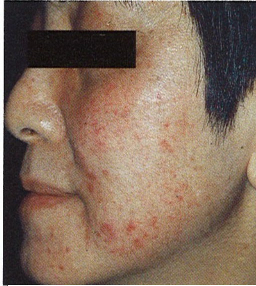
Pretreatment



Pretreatment



After 2-weeks of treatment



After 2-weeks of treatment

Medical History in Japan

Origin of Japanese Acupuncture: Waichi Sugiyama and his Text – Sugiyama Shindenryu (2)

Jikan Oura
Medical Historical Research Department
Kitasato University Oriental Medicine Research Center

2. Compilation of Sugiyama Shindenryu

"Technique of guide tube acupuncture" originally innovated by Waichi Sugiyama was inherited and further developed by the second Sokengyo (General Director of Blind organization), Yasuichi Mishima. "Sugiyama Shindenryu" is a theoretical and systematical compilation of those needle techniques. The title "shinden" means essential teachings of the school's theory and techniques. The compiler of this book was Wadaichi Shimaura who was the third Sokengyo.

The most distinctive features of Shindenryu are the detailed documentation of "guide tube acupuncture" practiced by Waichi Sugiyama and his students, and of practical techniques during needling. The text also described how those techniques were used for respective cases by showing specific clinical records. Those descriptions became known only recently and made a major impact in Japan as well. Shimaura was born the eldest son of a samurai, Naoyoshi Wada who served as a general of Yonezawa domain. Shimaura also became blind in infancy like Sugiyama and went to Edo to become a Sugiyama's student. He was so intelligent and suited Shogunate Tsunayoshi's palate and became the third Sokengyo in 1709. Compilation of Sugiyama Shindenryu made Shimaura's rise to Sokengyo.

Sugiyama Shindenryu brings an intriguing finding of the origin of Japanese acupuncture. Surprisingly, it described the oral teachings by Sugiyama and Mishima, and contained Irie's oral teachings which were the underlying basis of Sugiyama acupuncture, and even the historical heritage from the forerunners in the earliest days of Japanese acupuncture dating back to the 16th century. The book is comprised of three main volumes, *Omote No Maki*, *Naka No Maki* and *Ryuko No Maki*. In addition, it provides two other separate volumes, *Betsuden Sankan No Hou*, which described Waichi's methods of abdominal diagnosis, and *Mokuroku No Maki* and *Kaiden No Maki*.

Omote No Maki consists of five chapters and contains information on the diagnosis, treatment methodology and basic needle techniques of Sugiyama style that needs to be learned by beginners of acupuncture of Sugiyama style to become an acupuncturist. It explains eighteen techniques including Pulse Diagnosis, Abdominal Diagnosis, Treatment Methodology of Various Diseases, Foundational Techniques of Acupuncture, and Principle Needling techniques of Sugiyama style.

Naka No Maki consists of four chapters including advanced techniques, clinical applications and oral teachings that requires to be mastered by advanced acupuncturists. Chapter 1 describes ninety-six advanced and complicated techniques of guide tube acupuncture by Waichi Sugiyama. Chapter 2 describes clinical applications of the ninety-six techniques in case studies by Yasuichi Mishima. Chapter 3 contains a specialized study of clinical applications by Wadaichi Shimaura, and shows thirty-two clinical cases by Shimaura. There is also an assembled collection of oral teachings from other teachers of acupuncture. Chapter 4 contains clinical knowledge of the detailed treatment precaution and treatment of difficult cases by Wadaichi Shimaura.

Ryuko No Maki is a collection of studies describing some extraordinary acupuncture points (not related to meridians) compiled from Chinese archaeological evidence.

Figure: Sugiyama Shindenryu

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Excerpted from National Park Service