

Volume 6, Number 3 · Fall 2011

BERKELEY

Editorial

What Did Happen At That Disaster Koh Iwasaki

Special Report

Japanese Kampo Medicine after the Great East Japan Earthquake in Miyagi and Fukushima Prefectures Shin Takayama, Kumiko Watanabe, Koh Iwasaki, Takehiro Numata, Hitoshi Kuroda, Tadashi Ishii and Nobuo Yaegashi

Japanese Acupuncture - Current Research 1

The Support by Acupucnture and Moxibustion for the Stricken Area on the Great East Japan Earthquake Soichiro Mine

Japanese Acupuncture - Current Research 2

The Role of Acupuncture in the Great East Japan Earthquake Naoko Maeda, Yuki Uchida, Tomomi Narushima and Shuichi Katai

Clinical Report (Japan)

Acupuncture and Moxibustion Treatment for the Victims of the Great East Japan Earthquake after One and Half Months from its Occurrence

Raita Takasaki and Takashi Otsuki

Medical History in Japan

"Historical Significance of the Standardization of Acupoint Locations", the Second Japanese Acupoint Committee (3) Makoto Mayanagi

LIFENCE



College Logos

We believe it is necessary to create a new way of thinking for the total understanding of "Life, Survival, and Health".

We decided to coin the world "Lifence" to express this.

Lifence means the combination of life sceince and medicine as well as other disciplines such as health science, psychology, ethics, etc.

Our college logos symbolizes the above.

The ripple effect represents the ocean and the birth of life.

The rainbow colored sphere represents a safe environment and a barrier to protect us from negative influences.

The picture by Leonardo da Vinch represents a balanced body and health.

Completing our logos is a ring which represents the unity of space fulfilling the total meanings of lifence.



The Journal of Kampo, Acupuncture and **Integrative Medicine** (KAIM)

Research on Theory, Practice and Integration

EXECUTIVE EDITOR

Shuji Goto Chairman, GOTO College of Medical Arts & Sciences Tokyo, Japan

EDITOR-IN-CHIEF

Donald Lauda, Ph.D. Dean Emeritus, College of Health & **Human Services** California State University-Long Beach CA, U.S.A.

ASSOCIATE EDITORS

Shuichi Katai Ibaraki-ken, Japan Hiromichi Yasui Tokyo, Japan

EDITORIAL STAFF

Akihiro Souma Hiromi Sasaki Hiroshi Tsukayama Hitoshi Yamashita Junko Okubo Kazunari Ozaki Kengo Nakata Masayuki Kashima Naoya Ono Noboru Mitsuhata Sayaka Toda Takao Namiki Toshiaki Makino Toshihiro Togo

PUBLISHER

Shuji Goto International Institute of Health and Human Services, Berkelev

2550 Shattuck Avenue, Berkeley California 94704-2724, U.S.A.

The Journal of Kampo, Acupuncture and Integrative Medicine

Volume 6, Number 3 · Fall 2011

TABLE OF CONTENTS

1 Editorial

What Did Happen At That Disaster

Koh Iwasaki

3 Special Report

Japanese Kampo Medicine after the Great East Japan Earthquake in Miyagi and Fukushima **Prefectures**

> Shin Takayama, Kumiko Watanabe, Koh Iwasaki, Takehiro Numata, Hitoshi Kuroda, Tadashi Ishii and Nobuo Yaegashi

11 Japanese Acupuncture - Current Research 1

The Support by Acupuncture and Moxibustion for the Stricken Area on the Great East Japan Earthquake

Soichiro Mine

17 Japanese Acupuncture - Current Research 2

The Role of Acupuncture in the Great East Japan Earthquake Naoko Maeda, Yuki Uchida, Tomomi Narushima and Shuichi Katai

22 Clinical Report (Japan)

Acupuncture and Moxibustion Treatment for the Victims of the Great East Japan Earthquake after One and Half Months from its Occurrence

Raita Takasaki and Takashi Otsuki

28 Medical History in Japan

"Historical Significance of the Standardization of Acupoint Locations", the Second Japanese Acupoint Committee (3)

Makoto Mayanagi

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.

◆小太郎漢方製薬株式会社



KOTARO PHARMACEUTICAL introduced in 1957 the world's first Kampo extract preparations on the market. Later, in 1967, six of our preparations could be covered in Japan for the first time by the health insurance and after 1976 more than 100 of our preparations were used in hospitals and clinics. Now it is half a century since we put our Kampo extract preparations on the market and believe, we made a major contribution to this industry.

In the future we intend to continue working in accordance with our company motto: "Still better Kampo for still more people" and provide pharmaceutical products of still higher quality.



Origin of the company's name

The company was named "KOTARO" by its founder Taro Ueda with reference to his birth place. Close to the ancient city of Nara. Kotaro is the name of an enormous sheer cliff, 700 m wide and about 200 m high. Mr. Ueda felt an affection rising to the heavens for this cliff and thus made it the company's name.

KOTARO PHARMACEUTICAL CO., LTD.

5-23 Nakatsu 2-Chome, Kita-ku, Osaka 531-0071, JAPAN URL: http://www.kotaro.co.jp

1

Editorial

What Did Happen At That Disaster

Around 14:46:18 of March 11 of 2011, an incredibly strong earthquake that measured 8.0 on the Richter scale attacked our Tohoku district. The earthquake caused massive tsunami, engulfing and destroying a number of cities and towns on the Pacific coast. Even now, December 2014, the 15,889 persons were killed and 2,594 were missing. In the immediate aftermath, more than 500,000 people abandoned their houses and were forced to flee for refuge. All of express ways, railroads, and arterial roads, and Sendai International Airport, most of ports, power stations including Fukushima No. 1 Nuclear Power Plant, the Gas Production Plant of Sendai-city Gas Department, and many of the sewage treatment plants -these were all destroyed. Electricity, gas, water supplies, fuel, transportation, telecommunications (information gathering) were disrupted. Not to mention telephones, Internet and cellular phones did not get through. The city functions of Sendai, a mega city with a one million population, were completely shut down. People could scarcely get water and meals required for the day. Not even a single convenience store was open. The reservoirs of heating oil, and gasoline were depleted by quickly. People in the dark without electricity were listening to radio, the only information source, enduring hunger and shivering in the cold. Having strong earthquakes each and every day, everyone was trembling with fear. Tohoku University Hospital secured electricity for three days usage by the in-house power generation system. However, water supply systems, laboratory testing facilities, the radiation room, and the operation room were damaged. All we could do in the condition was to measure hematological blood counts and electrolytes with blood gas analyzers left scattered to the corners of the dialysis room. The operation of all heaters including the ones in the hospital ward was stopped and even the toilet water did not flush. Food for inpatients started running out of stock. As well as the University Hospital, Sendai Medical Center, Sendai City Hospital, and Kosei Nenkin Hospital concurrently suffered a great deal of damage and the medical systems were in the state of crash as a whole.

At this time, tragedies beyond our wildest imaginings were happening from east roads of Hachinohe, Miyako, Kamaishi, Rikuzentakata, Kesennuma, Shizugawa (Minamisanriku-cho), Onagawa, Ishinomaki, Shiogama, Sendai-city to all areas on the ocean side, Natori, Iwanuma, Soma, and Iwaki. Following the earthquake, tsunami waves reaching the highest water level of 38.9m (Miyako-city) travelled through the inland 5-6 kilometers from the coast and ran up Kitakami River to the point of 50km from the sea. Everything was swallowed. The lives of nearly 30,000 people were taken away in a heartbeat. Tidal waves of tsunami cyclically rolled on two or three times, continuously breaking down a gigantic breakwater, a several hundred tons ship, plants, petroleum tanks, and buildings. Ships and tanks were floated and the crashed concrete lumps were drifting around and completely destroyed remaining few structures and other things. Furious fires broke out and flames were rising up on the surface of the water. Coastal plants exploded one by one. Oil leaking from petro tanks and ships covered the water surface and ignited. Several days after the main quake, people were helpless. No one could do anything and no one could tell who evacuated to where and whether who was dead or alive. There were no roads. As telephone calls didn't get through, we here in Sendai had no ways of getting the information about coastal area, Ishinomaki and Kesennuma. The DMA (Disaster Medical Assistance Team) gathered from all over Japan got stuck at an airport and could not move at all. In the coastal areas, the buildings of fire fighters, emergency services, police, and government offices and hospitals were sunken by tsunami waves in a wink, so people could not have a method of calling for help. Helicopters could not approach the people seeking help on the roofs floating here and there on the burning water surface. At five degrees below freezing-point Celsius snow was falling thick and fast and survivors died one after another. Nearly five days since the main quake, the water receded at last and the fires went out after burning down everything. Then, a heap of wreckage, ruined houses, and a countless number of dead bodies - all these were covered with the sludge - were floating in lines of several hundred kilometers on the water surface in north and south along the Pacific coast in Tohoku.

On March 16 when the road toward the central city of Ishinomaki, the senter city of coastal region opened up at last, Tohoku University Hospital dispatched the first group of the medical assistance team. By their reporting, the horrible and devastating situation in the coastal region got through to us here in Sendai as a living reality. Thus the University Hospital immediately decided to send medical team members on a daily basis. On the following day (17th), the author headed for the coastal regionas a member of the team. From the day, members of the Department of Internal Kampo Medicine of Tohoku University Hospital took turns to provide medical assistance; 18th and 19th of March, physician Reina Okitsu who was then a postgraduate student; and 28th March, lecturer Shin Takayamaf acupuncture and moxibustion. And they still continue to provide medical assistance in the devastated sites. Kampo was finely effective for many diseases and symptoms that we experienced and acupuncture was exactly useful to relieve severe stiffness that developed by their lying down on hard floor of the shelters.

Koh Iwasaki

Director and Chair, Center for Traditional Asian Medicine
National Sendai-Nishitaga Hospital,
Professor of Clinical Science, Tohoku University Hospital

Special Report

Japanese Kampo Medicine after the Great East Japan

Earthquake in Miyagi and Fukushima Prefectures

(Kampo Medicine after Great East Japan Earthquake)

*Shin Takayama¹⁻³⁾, *Kumiko Watanabe⁴⁾,

Koh Iwasaki⁵⁾, Takehiro Numata²⁻³⁾,

Hitoshi Kuroda³⁾, Tadashi Ishii²⁻³⁾

and Nobuo Yaegashi⁶⁾

*First author and equal contribution

- Comprehensive Education Center for Community Medicine, Graduate School of Medicine, Tohoku University, Sendai, Japan
- 2) Department of Kampo Medicine, Tohoku University Hospital, Sendai, Japan
- 3) Department of Education and Support for Community Medicine, Tohoku University Hospital, Sendai, Japan
- 4) Department of Organ Regulatory Surgery, Fukushima Medical University School of Medicine, Fukushima, Japan
- 5) Southern Tohoku Research Institute for Neuroscience, Sendai, Japan
- 6) Department of Obstetrics and Gynecology, Tohoku University Graduate school of medicine, Sendai, Japan Corresponding auther: Shin Takayama

Keywords: JAPAN; TSUNAMI; DISASTER; EARTHQUAKE; KAMPO

Abstract

After the Great East Japan Earthquake and huge tsunami, traditional Japanese (Kampo) medicine was successfully used in the disaster-stricken areas in Miyagi Prefecture and in an outpatient clinic in Fukushima Prefecture. Here, we report the changes of patients symptoms in evacuation centers. Additionally, we present specific case reports of patients who were sucssessfully treated with Kampo medicine. Infectious diseases, common cold, and hypothermia were the predominant immediately after the disaster. The incidence of allergies increased 2 weeks later, and after another 6 weeks, mental distress increased. Kampo preparations such as kakkonto and keishito were administered to patients with common cold, whereas ninjinto and tokishigyakukagoshuyushokyoto were used for hypothermia. Further, Kampo preparations with anti-allergic properties, such as *shoseiryuto*, and tranquilizing properties, such as *kamikihito*, were prescribed. In the outpatient clinic in Fukushima Prefecture, patients diagnosed with stress disorder were treated with Kampo medicine, resulting in positive effects on both physical and mental/emotional symptoms. Thus, Kampo medicine is considered as a useful treatment that can be utilized along with Western medicine for various medical conditions that emerge after a natural disaster.

Introduction

The coastal areas of eastern Japan were devastated by the massive earthquake and tsunami that occurred on March 11, 2011. Tsunami waves reached a maximum height of approximately 16 m at the Miyagi fishery port of Onagawa, sweeping away people, cars, houses, and even whole communities (Fig. 1). At first, it was reported that approximately 26,000 people died or were missing, and that at least 100,000 houses were completely or partially destroyed [1, 2]. More than 400,000 people were forced to evacuate to evacuation centers. Many schools and community centers converted into evacuation centers were isolated and prevented from communicating with other areas due to inundated and severed roads in Miyagi Prefecture.

The Nuclear Power Plant in Fukushima Prefecture was also destroyed by the huge tsunami, causing radiation problems in the east coast of Fukushima (Fig. 2). Severe problems on the supply of air, water, food, and shelter emerged due to radiation pollution. The government urged people living within 20- to 30-km radius of the Fukushima Nuclear Power Plant to evacuate to farther and safer areas (Fig. 2). Everyone in east Japan experienced anxiety, irritability, sadness, and despair.

After the disaster, the Department of Kampo medicine in Tohoku University Hospital provided treatment with traditional Japanese (Kampo) medicine in the severely stricken disaster areas in Miyagi Prefecture. Kampo medicine was also used for patients at the clinic of Fukushima Medical University (Fig. 2).

In this report, we describe the disaster medical relief operation and medical conditions that emerged after the natural disaster that struck Miyagi Prefecture, as well as some case reports that were successfully treated using Kampo medicine.

Medical relief operations using Kampo medicine at the coastal areas of Miyagi Prefecture (modified from ref. [3, 4])

Based on the medical records and documents on the 12-day medical relief operations conducted at the evacuation centers in the Onagawa and Ishinomaki areas during the first 73 days after the disaster, we retrospectively investigated the data on symptoms and Kampo treatment (n = 236). Three periods were assessed: the acute period, starting from the day of the disaster up to the 14th day after the disaster; the sub-acute period, which includes the 15th to the 42nd day after the disaster; and the chronic period, which covers the 43rd to the 73rd day after the disaster. Data on symptoms and treatment were collected for each period. Kampo preparations used in this medical operation consisted of dried extract granules prepared from a boiled water extract of multiple raw materials. Quality control and assurance of these raw materials was performed by the Japanese pharmacopeia. These Kampo preparations were covered by the National Health Insurance of Japan. A list of Kampo preparations used in this operation is presented in Table 1.

We treated 72 patients during the acute period, 117 during the sub-acute period, and 47 during the chronic period. Figure 3 shows the treatment conducted at an evacuation center. Many of the patients had already received Western medications prescribed by the Ishinomaki Joint Medical Relief Team (IJMRT). A comparison of symptoms observed during the acute, sub-acute, and chronic periods is shown in Figure 4.

During the acute period, many patients presented with the common cold, hypothermia, and enterocolitis (Fig. 4). For patients with recent onset of symptoms of the common cold, Kampo

preparations such as *kakkonto* and *keishito* were used, whereas ninjinto and *tokishigyakukagoshuyushokyoto* were used for the treatment of hypothermia. Moreover, for patients with prolonged symptoms despite under the treatment of Western medicine, we prescribed *shosaikoto* and other similar Kampo preparations. *Goreisan* was prescribed for the treatment of enterocolitis accompanied by diarrhea or vomiting which were not relieved by anti-diarrheal agents or intestinal regulators (Table 1).

During the sub-acute period, allergic symptoms such as persistent cough, pharyngeal pain, runny nose, and itchy eyes were common (Fig. 4). Although many patients had already received antihistamines and other anti-allergy medications, many complained of adverse drug reactions such as drowsiness and impaired attention. Thus, we prescribed Kampo preparations with anti-allergy properties such as shoseiryuto for these patients (Table 1).

During the chronic period, an increase in psychiatric symptoms such as irritability, anxiety, lightheadedness, and insomnia were observed, as well as somatoform disorders (Fig. 4). For these symptoms, we prescribed Kampo preparations with tranquilizing properties, such as *yokukansan* and *kamikihito*. Moreover, many patients complained of constipation, mashiningan or junchoto were prescribed (Table 1).

Cases who received Kampo treatment at an evacuation center in Miyagi Prefecture

A case of fever and shivering

Case patient: A 60-year-old man Chief complaint: Chills and fever

History of the present illness: Chills and sore throat developed 2 days prior; the patient was treated by IJMRT the day before. The result of an influenza test was negative, an anti-inflammatory analgesic was prescribed. Intense chills and languor persisted until the next day, and the patient's body temperature showed over 38°C. Although the patient felt chills, no

fuel for heat to keep him warm was available. Then, he requested Kampo treatment.

Physical findings: Body temperature showed 38.1°C; face slightly pale; shivering; mild redness in the tonsils but no swelling; no rales in chest auscultation

Tongue diagnosis: The tongue was pale and showed a thin white coating

Pulse diagnosis: A sinking pulse

Prescription: Kampo preparation of *maobusisaishinto* (TJ-127, 7.5 g/day, for 2 days), taken orally 3 times a day with hot water before each meal

Progression: 30 min after administration, the patient sweated and were reliefed from chills. After oral administration for a day, the patient's fever declined to 36.8°C the following day, as well as dissipation of malaise. He expressed gratitude that he "received the most effective cold medicine he had ever taken."

A case of hypothermia

Case: A 80-year-old man

Chief complaints: Feeling of malaise and decline in motivation

History of the present illness: The patient was at home when the disaster struck, and nearly drowned when a portion of the first floor was flooded by tsunami waves. Somehow, his family was able to rescue him and they were evacuated and stayed in the evacuation center; he was wrapped in blankets while still wearing his dirty clothes. Although the patient ate his meals during the next several days, he gradually felt fatigue and appatite loss. He experienced intense malaise and was lying in the corner of a room in evacuation center.

Physical findings: Body temperature showed 34.8°C; no abnormal sounds heard in chest auscultation; face was pale; no shivering despite complaints of feeling cold; coldness in the trunk and limbs; redness in the third and fourth toes of both feet

Tongue diagnosis: The tongue was pale and showed a thin white coating

Pulse diagnosis: A sinking, slow pulse

Prescription: Kampo preparation of ninjinto

(TJ-32, 7.5 g/day, for 2 days) and tokishigyakukagoshuyushokyoto (TJ-38, 7.5 g/day, for 2 days), taken orally 3 times a day with hot water before each meal

Progression: Approximately 30 min after administration, the patient's feeling of coldness was alleviated and claimed that his vitality had returned. That day, he walked on his own to receive a meal, and the patient was able to consume the food. A dministration of Kampo preparations for 2 days could improve the patient's symptoms of hypothermia and malaise.

A case of allergic symptoms

Case: A 35-year-old man

Chief complaint: Persistent nasal discharge

History of the present illness: Following the earthquake, the patient left the evacuation center to go to his home each day to remove rubble and debris. Two weeks prior to presentation, he complained of persistent nasal discharge; he received treatment from the IJMRT, which prescribed him an antiallergy agent, but it failed to relieve the symptoms. He felt drowsiness after administration, which he thought was a side effect of the anti-allergy agent. He thus requested Kampo treatment.

Physical findings: A slender body type; body temperature showed 36.2°C; no redness or swelling in the tonsils or throat; no abnormal sounds heard in chest auscultation

Tongue diagnosis: Tongue was swollen and showed tooth marks

Pulse diagnosis: A thin, fast pulse

Prescription: Kampo preparation of *shoseiryuto* (TJ-19, 9.0 g/day, for 7 days), taken orally 3 times a day with hot water before each meal

Progression: One day after oral administration, the

patient reliefed from the symptom of nasal discharge, despite the cessation of the anti-allergy agent. Further, the patient no longer felt drowsiness, and thus showed an increase in work efficiency.

Cases who received Kampo treatment at the outpatient clinic of Fukushima Medical University

A case of insomnia, anxiety, dizziness, and floating sensation

Case: A 41-year-old woman

Chief complaints: Insomnia, anxiety, floating sensation, and palmar sweating

Occupation: Nurse

History of the present illness: The disaster struck while the patient was working at a hospital. As frequent aftershocks continued, she took rounds checking the safety of patients in each ward. On the day of the disaster, she was unable to return home and stayed at the hospital overnight; however, she began to feel as though her body was constantly shaking. The sight of herself shaking caused her to experience anxiety, fear, palmar sweating, and palpitations. After she returned home, she had to get back to work at the hospital for the night shift, where she felt the same symptoms. Thus, she developed a fear of going to work and was concerned that this fear would interfere with her work; hence, she joined the consultation 2 weeks after the disaster.

Physical findings: Body temperature showed 36.2°C; blood pressure, 150/90 mmHg; favorable appetite; frequently dreams while asleep; languor and swelling in the legs; no redness or swelling in the throat and tonsils; no abnormal sounds in chest auscultation

Tongue diagnosis: Reddish at the tip, some tooth indentations, and showed a thin white coating Abdominal diagnosis: Abdominal examination indicative of kyokyokuman (chest side painfulness), saijoki (palpitations above the umbilicus), and saikafujin (numbness below the umbilicus)

Prescription: She was prescribed the Kampo preparation of *saikokaryukotsuboreito* (TJ-12, 7.5 g/day, for 7 days), taken orally 3 times a day before each meal

Progression: 2 days later, she returned to work on the day shift. Despite having some anxiety, she no longer felt a sensation of floating and her palpitations stopped. On day 4, she had to visit her relative's home that had been heavily damaged by the disaster, and complained of being very anxious, but later reported that she was able to go and return home without flashback sensation. Presently, she has resumed her normal workload without taking any medications.

Discussion

During our medical relief operations in various evacuation centers, we have observed that the most common symptoms occurring in the first 2 weeks after the natural disaster included the common cold, hypothermia, and enterocolitis. The incidence of these symptoms may be related to the cold, winter weather and the unavailability of electricity, gas, and hot water to keep them warm. In addition, the evacuees were laid on cardboard and tarpaulin sheets placed on the floor; these evacuation centers had obviously depleted supply of blankets and bedding for them. Enterocolitis accompanied by vomiting or diarrhea was prevalent mainly in children. During this period, it was difficult to obtain drinking water; no water was available for washing hands. Occasionally, impure water from swimming pools was drawn for use, and thus, the unsanitary conditions in the evacuation centers could have influenced to the increase of enterocolitis cases.

Approximately 2 weeks after the disaster, complaints of persistent cough, pharyngeal pain, runny nose, and itchy eyes increased. At this time, the outside temperature gradually increased. Further the sludge and dirt that were brought in by the tsunami had dried and polluted the air. This period also coincided with the pollen allergy season.

These environmental factors may have influenced to the symptoms such as coughing and allergic reactions.

Approximately one month after the disaster, an increase in psychiatric symptoms such as insomnia, irritability, lightheadedness, and anxiety, as well as somatoform disorders was observed. This may be attributable to fatigue that was related to the extended stay of the evacuees at the evacuation centers and to the stress that they experienced from recurring aftershocks. In addition, many patients complained of constipation, possibly related with the composition of the meals, which mainly consisted of carbohydrates.

In this disaster medical relief operation, we observed that Kampo treatment relieved the symptoms of the patients. Kampo treatment is generally applicable after taking the history of the patient's illness and conducting a physical examination [5]; it was a useful tool for this particular natural disaster, when commonly used medical supplies were insufficient. The powder extract preparations of Kampo medicine have been used widely in Japan. Oral Kampo preparations administered to treat cold sensitivity and to ultimately increase the feeling of warmth in the body, which are based on the unique concepts of Kampo medicine, were effective to treat patients of hypothermia. Moreover, Kampo preparations for severe cold symptoms, anti-allergic agents that do not cause drowsiness, and antitussive agents for persistent cough were effective treatments that complement Western medicine. There were also occasions in which Kampo preparations were also used to treat symptoms during the chronic period, such as psychiatric disorders and constipation. Kampo therapy imparted beneficial effects on both physical and mental/emotional symptoms in patients.

Clinical evidence for the effectiveness of Kampo

medicines administered to patients affected by this particular natural disaster, such as maoto for common colds or influenza, shosaikoto for prolonged common colds, shoseiryuto for rhinitis, and vokukansan for psychiatric diseases, have been previously reported [5-9]. *Ninjinto* has been used to treat hypothermia and diarrhea [10], and goreisan has been administered to patients with nausea and diarrhea [11]. According to the book, "Discussion of Cold Damage," originally edited by Zhang Zhong-Jing, kakkonto, maoto, ninjinto, shoseiryuto, shosaikoto, and goreisan have been used as treatment for infectious diseases or hypothermia since ancient times [12]. The efficacy of Kampo medicines has thus been proven by its extensive history of clinical use. Kampo preparations are included in future medical relief supplies for disaster victims and that Kampo treatments are applied for treating a wide range of medical conditions.

Conclusion

Kampo medicine is a useful treatment that may complement Western medicine during extensive natural disasters.

Acknowledgments

We express our deepest appreciation and gratitude to the people throughout the world who offered their generous support and help after the earthquake and tsunami that affected the eastern coast of Japan. We have no conflicts of interest to declare.

References

[1] The Fire and Disaster Management Agency: The Tohoku Pacific Ocean Earthquake (Great East Japan Earthquake) in 2011 (115th report).

[2] Furukawa K, Arai H: Earthquake in Japan. Lancet 2011; 377 (9778): 1652.

- [3] Takayama S, Okitsu R, Iwasaki K, et al.: The Role of Oriental Medicine in the Great East Japan Earthquake Disaster. Kampo Medicine 2011; 62(5): 621-626 (in Japanese).
- [4] Takayama S, Okitsu R, Iwasaki K, et al.: Role of oriental medicine in the great East Japan earthquake. German Journal of Acupuncture and Related Techniques 2012; 55(2): 15-18 (in German).
- [5] Yuzo Sato, Toshihiko Hanawa, Makoto Arai, et al.: Introduction to KAMPO, Elsevier Japan K.K. 2005; 53-62. [6] Kubo T, Nishimura H: Antipyretic effect of Mao-to, a Japanese herbal medicine, for treatment of type A influenza infection in children. Phytomedicine 2007; 14(2-3): 96-101.
- [7] Kaji M, Kashiwagi S, Yamakido M: A double-blind, placebo-controlled study of TSUMURA Shosaikoto (TJ-9) for common cold. Rinsho to Kenkyu (Japanese Journal of Clinical and Experimental Study) 2001; 78: 2252-2268 (in Japanese).
- [8] Baba S, Takasaka T, Inamura N, et al.: Double-blind clinical trial of Sho-seiryu-to (TJ-19) for perennial nasal allergy (in Japanese). Jibiinkokarinsho 1995; 88(3): 389-405. [9] Iwasaki K, Satoh-Nakagawa T, Maruyama M, et al.: A randomized, observer-blind, controlled trial of the traditional Chinese medicine Yi-Gan San for improvement of behavioral and psychological symptoms and activities of daily living in dementia patients. J Clin Psychiatry 2005; 66(2): 248-252.
- [10] Lui G, Lui C, Donald L, et al.: Fundamentals of Formulas of Chinese Medicine. Hua Xia Publishing House 2007; 65.
- [11] Robert R: Japanese Herbal Medicine. Avery Publishing Group 1999; 120.
- [12] Volker S, Dan B, Andrew E, et al.: Chinese Herbal Medicine Formulas and Strategies 2nd Edition. Eastland Press 2009; pp7-9, pp19-21, pp212-4, pp104-109, pp257-260, pp724-728.

Table 1: A list of Kampo preparations mainly prescribed during the current medical relief operation

auring	me currei	it medical re	ner oper	at1011		
Period	Symptoms	Application of Kampo extract granules	Dried extract glanules in daily dosage (g)	Contents ratio (JP: The Japanese Pharmacopoeia)		
		Keishito	3.0	JP Cinnamon Bark(4.0g) JP Peony Root(4.0g) JP Jujube(4.0g) JP Glycyrrhiza(2.0g) JP Ginger(1.5g)		
	Common cold	Kakkonto	3.75	JP Pueraria Root(4.0g) JP Jujube(3.0g) JP Ephedra (Herb(3.0g) JP Glycyrrhiza(2.0g) JP Cinnamon Bark(2.0g) JP Peony Root(2.0g) JP Ginger(2.0g)		
		Maobushisaishinto	1.5	JP Ephedra Herb(4.0g) JP Asiasarum Root(3.0g) JP Powdered Processed Aconite Root(1.0g)		
		Kikyoto	1.25	JP Glycyrrhiza(3.0g) JP Platycodon Root(2.0g)		
Acute	Tonsillitis	Shosaikotoka- kikyosekko	5.0	JP Gypsum(10.0g) JP Bupleurum Root(7.0g) JP Pinellia Tuber(5.0g) JP Scutellaria Root(3.0g) JP Platycodon Root(3.0g) JP Jujube(3.0g) JP Ginseng(3.0g) JP Glycyrrhiza(2.0g) JP Ginger(1.0g)		
	Hypothermia	Tokishigyakuka- goshuyushokyoto	4.0	JP Jujube(5.0g) JP Cinnamon Bark(3.0g) JP Peony Root(3.0g) JP Japanese Angelica Root(3.0g) JP Akebia Stem(3.0g) JP Glycyrrhiza(2.0g) JP Evodia Fruit(2.0g) JP Asiasarum Root(2.0g) JP Ginger(1.0g)		
Subacute	Ploronged common cold	Shosaikoto	4.5	JP Bupleurum Root(7.0g) JP Pinellia Tuber(5.0g) JP Scutellaria Root(3.0g) JP Jujube(3.0g) JP Ginseng(3.0g) JP Glycyrrhiza(2.0g) JP Ginger(1.0g)		
		Rikkunshito	4.0	JP Atractylodes Lancea Rhizome(4.0g) JP Ginseng(4.0g) JP Pinellia Tuber(4.0g) JP Poria Sclerotium(4.0g) JP Jujube(2.0g) JP Citrus Unshiu Pee(2.0g) JP Glycyrrhiza(1.0g) JP Ginger(0.5g)		
	Enterocolitis	Goreisan	2.0	JP Alisma Rhizome (4.0g) JP Atractylodes Lancea Rhizome(3.0g) JP Polyporus Sclerotium(3.0g) JP Poria Sclerotium(3.0g) JP Cinnamon Bark(1.5g)		
		Ninjinto	2.5	JP Processed Ginger(3.0g) JP Glycyrrhiza(3.0g) JP Atractylodes Lancea Rhizome(3.0g) JP Ginseng(3.0g)		
	Rhinitis	Shoseiryuto	5.0	JP Pinellia Tuber(6.0g) JP Processed Ginger(3.0g) JP Glycyrrhiza(3.0g) JP Cinnamon Bark(3.0g) JP Schisandra Fruit(3.0g) JP Asiasarum Root(3.0g) JP Peony Root(3.0g) JP Ephedra Herb(3.0g)		

	Itchy eyes	Eppikajutsuto	3.25	JP Gypsum(8.0g) JP Ephedra Herb(6.0g) JP Atractylodes Lancea Rhizome(4.0g) JP Jujube(3.0g) JP Glycyrrhiza(2.0g) JP Ginger(1.0g)
	Dry cough	Bakumondoto	6.0	JP Ophiopogon Tuber(10.0g) JP Pinellia Tuber(5.0g) JP Jujube(3.0g) JP Glycyrrhiza(2.0g) JP Ginseng(2.0g) JP Brown rice(5.0g)
Chronic		Mashiningan	2.25	JP Hemp Fruit(5.0g) JP Rhubarb(4.0g) JP Immature Orange(2.0g) JP Apricot Kernel(2.0g) JP Magnolia Bark(2.0g) JP Peony Root(2.0g)
	Constipation	Junchoto	1.5	JP Rehmannia Root(6.0g) JP Japanese Angelica Root(3.0g) JP Scutellaria Root(2.0g) JP Immature Orange(2.0g) JP Apricot Kernel(2.0g) JP Apricot Kernel(2.0g) JP Rhubarb(2.0g) JP Rhubarb(2.0g) JP Peach Kernel(2.0g) JP Hemp Fruit(2.0g) JP Glycyrrhiza(1.5g)
	Insomnia	Sansoninto	3.25	JP Jujube Seed(10.0g) JP Poria Sclerotium(5.0g) JP Cnidium Rhizome(3.0g) JP Anemarrhena Rhizome(3.0g). JP Glycyrrhiza(1.0g)
	Irritation	Yokukansan	3.25	JP Atractylodes Lancea Rhizome(4.0g) JP Poria Sclerotium(4.0g) JP Cnidium Rhizome(3.0g) JP Uncaria Hook(3.0g) JP Japanese Angelica Root(3.0g) JP Bupleurum Root(2.0g) JP Glycyrrhiza(1.5g)
	Anxiety	Kamikihito	5.0	JP Astragalus Root(3.0g) JP Bupleurum Root(3.0g) JP Jujube Seed(3.0g) JP Atractylodes Lancea Rhizome(3.0g) JP Ginseng(3.0g) JP Poria Sclerotium(3.0g) JP Longan Aril(3.0g) JP Longan Aril(3.0g) JP Jujube(2.0g) JP Jujube(2.0g) JP Jujube(2.0g) JP Japanese Angelica Root(2.0g) JP Glycyrrhiza(1.0g) JP Ginger(1.0g) JP Ginger(1.0g) JP Saussurea Root(1.0g)
	Fatigue	Hochuekkito	5.0	JP Astragalus Root(4.0g) JP Atractylodes Lancea Rhizome(4.0g) JP Ginseng(4.0g) JP Japanese Angelica Root(3.0g) JP Bupleurum Root(2.0g) JP Jujube(2.0g) JP Citrus Unshiu Peel(2.0g) JP Glycyrrhiza(1.5g) JP Cimicifuga Rhizome(1.0 g) JP Ginger(0.5 g)



Figure 1: The seismic center of the Great East Japan Earthquake and the location of Miyagi and Fukushima prefecture



Figure 3: Kampo treatment at an evacuation center

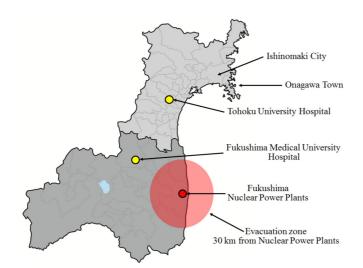


Figure 2: The location of Tohoku University Hospital in Miyagi prefecture and Fukushima Medical University Hospital in Fukushima prefecture

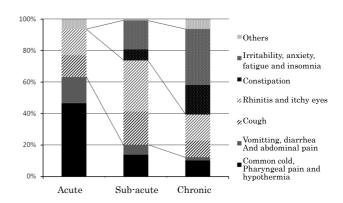


Figure 4: Comparison of symptoms during the acute (1st to 14th day after the disaster, n=72), sub-acute (15th to 42nd day, n=117), and chronic (43rd to 73rd day, n=47) periods, modified from the references 3 and 4

Japanese Acupuncture - Current Research 1

The Support by Acupuncture and Moxibustion for the Stricken Area on the Great East Japan Earthquake Soichiro Mine

The Forum of Social Sciences of Acupuncture and Moxibstion

Research Report

[Preface]

In the wake of the Great East Japan Earthquake occurred on March 11, 2011 and the subsequent Tsunami disaster, support services from various medical areas were provided. Practitioners of acupuncture and moxibustion from all over Japan also provided support in the affected areas through acupuncture and moxibustion.

The author conducted research to find out what support activities the practitioners performed in the affected areas during the period from June to July of 2011. In writing this paper, the author additionally searched four journals relating to acupuncture and moxibustion published during the period from April 2011 to September 2012 ("The Journal of Ido no Nippon," "Shinkyu Journal," "Clinical Journal of Traditional Chinese Medicine," and "Shinkyu OSAKA") for information about the time of activity and areas of activity of the groups that were not known in the aforementioned research.

This paper is to report the results of these investigations.

In addition, it was found by searching the Internet and from informants that there were various forms of support activities other than those found by on-site research and the Internet search, including personal activities and non-continuous one-shot activities. The subject activities of this investigation were those of groups that were performed continuously. There was the possibility, however, that group activities satisfying the research requirement were not chosen as investigation subjects. The author would give an additional remark here that although it is considered that many supportive activities were

done by practitioners of acupuncture and moxibustion in the areas affected by the Great East Japan Earthquake, the process of clarifying the whole picture is still under way.

[Purpose]

To investigate and clarify the general picture of what kinds of support activities by the Japanese practitioners of acupuncture and moxibustion were implemented for the disaster caused by the Great East Japan Earthquake.

[Research overview]

1. Subjects

Groups that provided support services in the affected areas using acupuncture and moxibustion treatment after March 11, 2011 and the active period for one time or the total duration of activities was five days or more.

2. Methods

(1) Method of subject selection

1) Subject sampling and information gathering on the Internet.

The Internet site http//www.google.co.jp was searched with the keywords of "Great East Japan Earthquake," "acupuncture," "volunteer," "local activities," "medical support," and "group."

2) Information gathering from informants

In parallel with the web search, a request for information about the support activities with acupuncture and moxibustion was posted by Japan Society of Acupuncture and Moxibustion and other associations and those who had the information were asked to provide the information as informants and then research subjects were extracted.

3) Information search through journals of acupuncture and moxibustion

To find out the group names and their activity time that were not known from 1) and 2) above, four acupuncture and moxibustion related journals published during the period from April 2011 to November 2012 ("The Journal of Ido no Nippon," "Shinkyu Journal," "Clinical Journal of Traitional

Chinese Medicine," and "Shinkyu OSAKA.") were used .

(2) Search period

The information search period through the Internet and the informants were two months from June to July 2011.

Search through magazine media was done in December 2011.

The continuity of the activities was confirmed by monitoring their activity reports on the Internet.

(3) Research method

An e-mail questionnaire was sent to the groups selected as subjects by 1) and 2) above.

Questionnaire items were unified in principle. However alterations were made where applicable so as to making it a top priority to clearly bring out the actual situation about the activities.

Questionnaire items were as follows:

- a. Place of activities
- b. Activity time
- c. Subjects to be treated
- d. Accumulated number of treated persons
- e. Accumulated number of treatment providers joined
- f. Complaints frequently made.
- g. Existence or non-existence of cooperation with other healthcare professionals and medical institutions. If existing, please let us know the cooperated partners or the kind of occupation.
- h. Existence or non-existence of the accepting organization in the local area and linkages with the local municipalities and their external bodies. If existing, please let us know the contact address.

[Results]

Ten groups were extracted as research subjects trough the Internet and the information provided by the informants. Of them, nine groups returned the answers to the questionnaire. In addition to these groups, one group was found in the additional search using journals.

From the above investigation, it was confirmed

that there were two types of groups that performed activities of disaster medical care with acupuncture and moxibustion in the aftermath of the Great East Japan Earthquake; the ones formed based on existing organizations (Table 1), and the others organized for the purpose of providing support to the affected areas (Table 2).

The activities started at the earliest on March 17 and most of them ended in the year of 2011, except two groups that were continuing their activities at the time of December 2012.

The areas of activities were Fukushima refecture, Miyagi prefecture, and Iwate prefecture. As for Fukushima prefecture, the places of activities were inland areas designated as the evacuation areas due to the nuclear plant accident. In Miyagi prefecture and Iwate-prefecture, areas of activities were centered in those affected by the tsunami (Figure 1).

The answers to the questionnaire indicated that actual places of activities ranged from the evacuation centers, private houses, administrative facilities, fire-fighting facilities to welfare facilities.

Subjects to be treated included, in addition to the disaster evacuees, "suffered rescuer" who themselves were also victims of the disaster (staff members of the evacuation centers, and employees of fire-fighting and the local medical institutions, etc.) as well as volunteers in the evacuation centers.

As to cooperation with other medical professions, linkages with the medical staff in the places of refuge accounted for a major portion of the relevant answers, except for the groups whose activities were composed of varieties of medical professions.

As to cooperation with local organizations, they were made mainly with institutions such as local municipalities, local welfare councils and volunteer centers. In the case there were confusions at the acceptance counters, negotiations were made directly with individual refuge places.

Common chief complaints were stiff shoulders, pain in the neck and shoulders, and low back pain, and other complaints were difficulty sleeping and constipation (Figure 2).

[Consideration]

The research has revealed that medical support activities were performed by practitioners of acupuncture and moxibustion with certain continuity in the affected areas and that their activities were not limited to the evacuation centers. This suggests that there are needs for acupuncture and moxibustion in affected areas after the occurrence of a disaster.

In general disasters, the acute phase in which treatment of life-saving and trauma is significant is followed by the chronic phase in which continuous health care of affected people becomes a problem. The earthquake disaster in the East Japan, however, is characterized by the extremely short acute phase. Coupled with medical institutions being devastated by the tsunami, evacuees with chronic diseases were forced to interrupt the treatment, their daily livings were isolated from their usual time, and disaster victims who acted as "suffered rescuer" worked hard - all these caused problems from an early period such as complaints relating to motor organs, constipation, difficulty sleeping, which accounted for a large portion of the chief complaints in the questionnaire answers. So, it can be considered that handling these health problems that disaster victims have will contribute to medical support in affected areas.

There was at least one group of the survey subjects that created a manual and had it available for measuring blood pressure, pulse rate, and body temperature if necessary. Measurement vital signs and the practice of Japanese style acupuncture and moxibustion in the evacuation centers and temporary houses where sufficient medical support is inaccessible — characterized by it that spends a certain amount of time one-on-one with a patient, touching her or his body while treatment is being performed - enables the practitioner to detect the

sings of serious illness or worsening underlying diseases, and then the care can be taken over by an associated health team or an associated physician, which suggests the Japanese style acupuncture and moxibustion have the possibility of functioning as primary preventive medicine.

[Conclusion]

It has been confirmed in the Great East Japan Earthquake, medical support by practitioners of acupuncture and moxibustion in the affected areas was provided and the continuous activities mainly in the areas affected by the tsunami. The subjects to be treated included not only the disaster sufferers but also "suffered rescuer" who were also disaster victims in various places of refuge. It can be considered from this that medical support in the affected areas by the practitioners of acupuncture and moxibustion responded to treatment needs for unidentified complaints caused by the disaster experience and the subsequent life of evacuation. And this also suggests that acupuncture and moxibustion will be able to have some role in primary preventive medicine.

Meanwhile, for possible disasters, it is required to verify the possibility of providing medical support by practitioners of acupuncture and moxibustion in affected areas, the limitations of their activity, and issues and problems.

[Lastly]

I extend my heartfelt condolence to those who died in the Great East Japan Earthquake. I also express my heartfelt sympathy to those who are still missing and many people who lost their acquaintances and are forced to go through all kinds of privations.

I wish to express my sincere gratitude to Prof. Shuichi KATAI of National University Corporation Tsukuba University of Technology for your valuable cooperation and guidance he provided to me in writing this paper.

Group Names	Areas of Activity	Activity Period
Fukushima-prefecture Shinkyu-shi Kai	Fukushima-prefecture: Koriyama-city Iwaki-city Aizuwakamatsu-city Ono-machi Fukushima-city	3/17/2011 - 6/19/2011
Tohoku University Hospital Kampo Internal Medicine	Fukushima-prefecture: Aizusakashita-machi Miyagi-prefecture: Ishinomaki-city Shichigahama-machi	End Mar - June/2011
AMDA	Iwate-prefecture: Otsuchi-cho	3/28/2011 - Ongoing (Otsuchi-cho)
Tokyo Rojyo Hari-Kyu Team	Fukushima-prefecture: Soma-city Miyagi-prefecture: Yamamoto-cho	4/16/2011 · 6/12/2011 (Soma-city, every Sunday, total 10 times) 5/22/2011 · August/2011 (Yamamoto-cho)
Hokkaido College of High Technology Saigai Fukko Shin-Kyu / Jusei Volunteer Team	Miyagi-prefecture: Kesennuma-city Iwate-pref.: Ofunato-city	4/30/2011 - 5/5/2011
Acupuncture Moxibustion & Orthopedic Clinic TAIU	Fukushima-prefecture: Iwaki-city	4/23/2011 - 5/22/2011 (every week end)
Morinomiya University of Medical Sciences Graduate School of Health Sciences Team	Miyagi-prefecture: Kesennuma-city	4/30/2011 - 5/6/2011

Table 1 Groups formed based on the existing organizations

Group Names	Areas of Activity	Active Time			
Saigai Shin-Kyu Massage Project	Miyagi-prefecture: Iwanum-city Natori-city Shiogama-city Kesennuma-city Ishinomaki-city Minamisanriku-cho (For Kesennuma and Ishinomaki, dispatch request	3/27/2011 - 5/12/2011 (Iwanuma-city) 4/6/2011 - 5/12/2011 (Natori-city) 4/16/2011 - 5/11/2011(Shiogama-city) 5/1/2011 - 6/30/2011 (Kesennuma-city) 7/17/2011 - 9/28/2011 (Ishinomaki-city) 5/28/2011 - 12/6/2011(Minamisanriku-cho)			
Volunteers from Shiga-ken Shinkyu-Shi Kai	was made by PCAT.) Miyagi-prefecture: Ishinomaki-city	4/28/2011 - 5/7/2011			
Volunteers from Hanada College Almni	Onagawa-cho				
Team of Shiga-ken H Sensei	Miyagi-prefecture: Ishinomaki-city	6/3/2011 - 6/6/2011 7/15/2011 - 7/19/2011 Ongoing intermittently.			
Hisai-Sha Shien Project Team Oriental Medicine	Miyagi-prefecture: Higashi-Matsushima-city Miyagi-prefecture: Ishinomaki-city Miyagi-prefecture: Shichigahama-cho Miyagi-prefecture: Onagawa-cho	April/2011 Ongoing			

Table 2 Groups newly formed for providing medical support in affected areas.

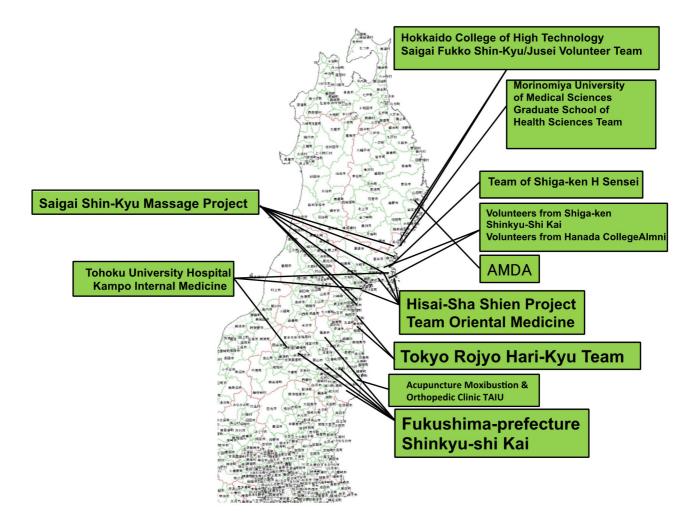


Figure 1 Areas of Medical Support Activities by Practitioners of Acupuncture & Moxibustion

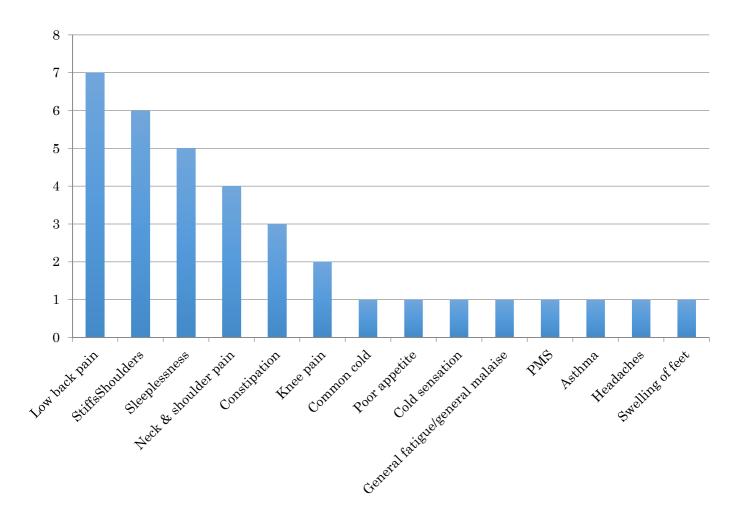


Figure 2 Major Chief Complaints

Japanese Acupuncture - Current Research 2

The Role of Acupuncture in the Great East Japan Earthquake Naoko Maeda¹⁾²⁾, Yuki Uchida¹⁾, Tomomi Narushima³⁾ and Shuichi Katai³⁾

Center for Integrative Medicine, Tsukuba University of Technology
 Ayumi Midwife Clinic, Ayumi acupuncture and moxibustion Clinic
 National University Corporation, Tsukuba University of Technology

Introduction

Nine months have passed since the Great East Japan Earthquake of March 11, 2011. This was the most powerful known earthquake ever to have hit Japan, followed by repeated shocks as powerful as the principal one. The earthquake triggered powerful tsunami waves, causing a number of nuclear plant accidents. The damage by both devastating earthquake and mega Tsunami was exceptionally massive and reconstruction from the devastation has not made the desired progress.

After the disaster, we performed acupuncture and moxibustion as volunteers in Ibaragi-prefecture designated as a semi-devastated zone. At the time we conducted a questionnaire and gathered opinions of other volunteer practitioners who had been continually providing acupuncture and moxibustion, which are summarized as follows:

[Method]

1. Period and Place of Questionnaire

We volunteered acupuncture and moxibustion and conducted a questionnaire survey at the same time: on April 17 in Community Center in Nakacity for 5 hours, on May 1 in Seishounen-Kaikan in Mito-city for 5 hours, on May 4 in Civic Gymnasium/evacuation shelter in Kita-Ibaragicity for 1 hour, on the same day in Maternity Care Ito for 3 hours, on June 16 in Takahagi Kyodo Hospital in Takahagi-city for 5 hours and July 31 in Kyu-Tokai-village Community Center for 2 hours (Table 1).

2. Questionnaire subjects

The subjects were 148 persons who received acupuncture and moxibustion by 5 volunteer practitioners (total 13 practitioners) in the central Ibaragi and northern Ibaragi.

Treatment	Time	Place	No. of treatment recipients	No. of questionnaires	Response rates	No. of practitioners	Treatment hours
1	4.17	Nako-city Community Center	25	25	100	3	5
2	5.1	Mito-city Seishounen Kaikan	48	47	97.9	4	5
3	5.4	Kita-Ibaragi-city Civic Gymnasium, Maternity Care Ito	26	23	88.5	3	4
4	6.16	Takahagi-city Takahagi Kyodo Hospital	36	36	100	1	5
5	7.31	Tokai-village Community Center	12	12	100	2	2
Total			148	143	96.6	13	

Table 1: Place of Questionnaire and Response Rates

3. Method

The questionnaire was anonymous. Before the volunteer work began, the volunteer recipients received the questionnaire sheet together with a medical interview sheet at the reception. At the end of the treatment, the practitioners urged the recipients to cooperate with us by answering the questionnaire. The questionnaire was completed in a separate room and collected.

4. Questionnaire

The questionnaire had the respondents pick an answer from a given number of options for seven questions of sex, age, damage situation, physical condition on the day, effectiveness of the treatment, their desire whether to receive treatment next time and publicity. As for two items of good points and points to be improved about volunteers, the respondents were free to give any answer.

5. Procedures of volunteer practice

Treatment/care was provided for 20 minutes per person. After a brief medical interview, physical findings were obtained with palpation. Then, Pyonex press-tack needles were applied into reactive points after careful preliminary massage.

Results

1. Response rates

The total number of respondents was 143 out of 148 with the overall response rate of 96.6%. The response rates at the first time treatment/care were 100%, 97.9% at the second time, 88.5% at the third time and 100% at the fourth time and fifth time (Table 1).

2. The 143 respondents consisted of 25 males and 118 females. Generation breakdown was 2 respondents in their 10s, 15 in their 20s, 68 in their 30s, 30 in their 40s, 14 in their 50s, and 12 in their 60s. The male-female ratio was 17.5% for male and 82.5% for female (Table 2).

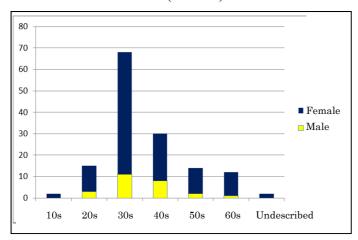


Table 2: Generation Ratio of Treatment Recipients

3. Somatic complaints \square

The painful or discomfort regions on the day were (multiple answers) shoulders in 104 (72.7%), low back in 62 (43.4%), broad of the back in 48 (33.6%), extremities in 24 (16.8%), head in 16 (11.2%), and arms in 11 (7.7%). Three respondents gave no answer on this question. Two respondents gave the answer of having no special symptoms (Table 3). In view of each care, there were no major differences in their complained conditions from the first care through to the fifth care (Table 4).

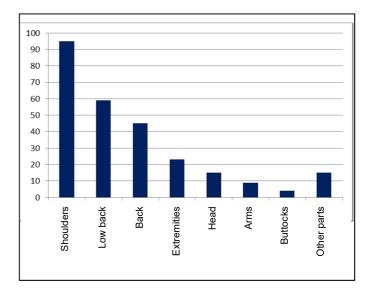


Table3: Painful or Discomfort Regions

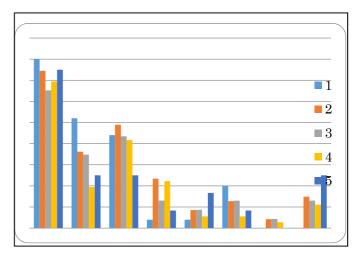


Table 4: Complained Conditions by Number of Care

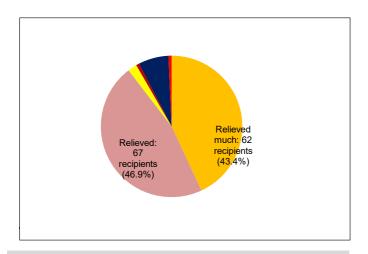
4. Characteristics by generation

As the fourth time treatment was for healthcare professionals, data of four times treatments only from women were counted excluding those of professionals. Symptoms of 84 women (2 without name and 2 in their 10s were excluded from the total 88 volunteer recipients) were categorized into shoulders in about 80% of women with 54.5% of those in 60s, and the dorsal region in about 40% in 20s, 30s, and 40s and about 15% in 50s and 60s. Many of those in their 20s, 40s, and 60s had symptoms in the low back region. Symptoms of the head were complained by 13 women, of which 10 were in their 30s.

5. Effect of treatment/care

Care effects in all recipients were "very much relieved" in 62 (43.4%), "relieved" in 67 (46.9%), and "remained same" in 3 (2.1%), of which 2 claimed that they had originally had no special disorder. One (1) respondent answered "became worse, taking it a response for a change for the better." The respondent said that when writing answers, lassitude had already appeared. Ten (10) respondents (7.0%) gave no answer and one (1) answered "do not know yet" (0.7%).

Effects are grouped for each time of volunteer care: the 1st time, very much relieved in 17 (68.0%), relieved in 7 (28.0%), and no changes in 1 (4.0%). The 2nd time, very much relieved in 26 (55.3%), relieved in 19 (40.4%), more painful in 1 (2.1%), no answer in 1 (2.1%). The 3rd time, very much relieved in 11 (47.8%), relieved in 10 (43.5%), and no answer in 2 (8.7%). The 4th time, very much relieved in 4 (11.1%), relieved in 24 (66.7%), no change in 2 (5.6%), no answer in 5 (13.9%), and "do not know yet" in 1 (2.8%). □ The 5th time, very much relieved in 4 (33.3%), relieved in 7 (58.3%), and no answer in 1 (8.3%) (Table 5).



Consideration

We provided acupuncture and moxibustion as volunteers for the people who suffered damages from the East Japan Earthquake and conducted a

questionnaire survey. Our goal was to perform acupuncture and moxibustion to ensure they become pleased and relaxed, the questionnaire was conducted for the purpose of recording volunteer acupuncture and moxibustion. Therefore, the questionnaire was not carried out in the way that rigorously show effectiveness. Whether conducting a questionnaire in the aftermath of the disaster is appropriate or not is being argued widely. We conducted it 1-4 months after the earthquake, but there have been no complaints received. There were three months between the first time practice and the 5th time practice. However, there were no major differences in the painful regions in different times of treatment.

With this e volunteer treatment, continuous care could not be provided to specific persons, so options concerning unexplained physical complaints and mental health complaints were not provided on the questionnaire. Therefore they were not reflected in the analysis of the questionnaire. When treatment recipients began to talk about the disaster during the course of treatment, individual practitioners responded to them. Because of difficulties providing continuous care, prior discussion had been made between the volunteer practitioners and it had been determined that volunteer practitioners would not discuss mental health matters. Whether volunteer practitioners should get involved in unidentified complaints or psychological matters was difficult to decide as this largely relates to whether or not the practitioners get themselves ready for handling such matters. However, psychological health problems are important subjects after the disaster. To what extent the practitioners should be involved, opinions may be divided and discussions will arrive at the conclusion that mental health matters should be responded on a case-by-case basis.

For psychological problems after the disaster, conditions were classified into three phases, (i.e. acute

phase, subacute phase, and mid to long term phase and problems are handled in many cases according to the classification). This time, the author, et al. performed acupuncture and moxibustion for those in the subacute phase and obtained effects. We became convinced that care with acupuncture and moxibustion is sufficiently beneficial for keeping the disaster victims in good physical condition.

The disaster of the earthquake of this time which was unprecedentedly large accompanied by the massive damage by Tsunami disaster had a special progression. The utmost priority during the acute phase is lifesaving. In the mid-long term phase, reconstruction starts but the victims have a feeling of helplessness and a feeling of weariness. The characteristics of this phase are problems for each individual tended to be forgotten psychological problems are prone to arise 1). Sleeplessness develops and physical condition becomes bad. Anyhow, we think it important to study how acupuncture and moxibustion can get involved in each of the phases. We expect related parties in each region will conduct such studies.

Acupuncture and moxibustion related magazines carry articles on volunteer practice of acupuncture and moxibustion after the disaster of the earthquake and tsunami. These articles report the status immediately after the disaster and the condition of four months later^{2)-7).}

A few months after the disaster, earthquakes have occurred in many parts of the world. Japan is well known for earthquakes. However, every one of us who are engaged in health care does not know how to respond to the people in need of care when a disaster occurred. As there are no published guidelines or booklets, the author worked in the dark to make the plan for volunteering acupuncture and moxibustion and actually implement it. If I have done volunteer work on a regular basis, it could be a little different. And I felt it necessary to take an interest in how to respond to an emergency situation. Although a general "Disaster Response Manual" has already been prepared 8)-11). I consider that creating a volunteer program implementation manual of acupuncture and moxibustion is also necessary.

Several organizations sent volunteer practitioners of acupuncture and moxibustion to each of the affected areas. These volunteers made reports of results. They also report that acupuncture and moxibustion can play a part of medical treatment. The records of volunteer acupuncture and moxibustion by individual practitioners will be valuable. In organizing the date, we will see the role of acupuncture and moxibustion and issues in disasters.

Studying the role of acupuncture and moxibustion at the time of disasters and getting prepared for its implementation for the future is also necessary.

References (Only Japanese versions are available.)

- Gaishou-sutoresu-kanren-Shougai nikanrensuru Kenkyu-kai. KIN Yoshiharu. Shinteki Torauma no Rikai to Kea 2nd version. Kabushikikaisha Jihou. 2005; 85-86
- Higashi Nihon Daishinsai no Hinansha wo Sapooto suru Shinkyushi tachi. Ido no Nippon; 2011; 812:23-28
- 3. "Temomin" de Dekirukoto. Oriental Medicine Journal of Acupuncture and Moxibustion; 2011.23:69-72
- 4. Fukushima-ken no Hinanjyo niokeru Shinkyu Boranthia Houkoku. Oriental Medicine Journal of Acupuncture and Moxibustion; 2011.22:68-69
- 5. Shiogama-shi niokeru Boranthia Katsudou Houkoku. Oriental Medicine Journal of Acupuncture and Moxibustion; 2011.22:70-73

- 6. Hisaisha Shien Purojyekuto Chiimu, Toyo Iryo Micchaku Report. Ido no Nippon; 2011.(816):116-121
- 7. Daishinsai to Shinkyu no Yakuwari. Oriental Medicine Journal of Acupuncture and Moxibustion; 2011.22:50-65
- "Ibaragi-ken Hoken Fukushi-bu Saigaitaisaki Manual" http://www.pref.ibaraki.jp/bukyoku/hoken/koso/disaster_manual/digest/all files.pdf
- 9. Jishin Taisaku Manyuaru Sakusei no Pointo http://www.tokiorisk.co.jp/risk_info/up_file/200402057.pdf
- 10. Ninsanpu/Nyuyouji wo Mamoru Saigaitaisaku Gaidorain, Tokyo Metropolitan Government
- Kousei Roudousho kara Hasshutsushita Tsuuchi (March 18, 2011)
 http://www.mhlw.go.jp/stf/houdou/2r98520000015ks m.html

Clinical Report (Japan)

Acupuncture and Moxibustion Treatment for the Victims of the Great East Japan Earthquake after One and Half Months from its Occurrence

Raita Takasaki and Takashi Otsuki Department of Acupuncture, Morinomiya University of Medical Sciences

1. Introduction

A friend of one of the authors, Takazaki, lost a factory for processing shark fins that had been run by the family for three generations through the tsunami caused by the Great East Japan Earthquake. Sparked by this event he planned to initiate acupuncture and moxibustion volunteer work as part of the recovery and reconstruction process in the region where victims of the earthquake disaster live. Treatment location was the Kesenuma general sports facility (K-WAVE), the largest refuge in the region. Immediately after the earthquake disaster about 1,000 people sought refuge here, but when we visited the site on April 30 about 600 still sought shelter there. Many of these people suffered from a high level of disaster induced stress. Moreover, the unfamiliarity of cohabitation and the restoration work caused many people to complain about mental and physical symptoms. While describing in this paper one of the most striking of these symptoms, we also give an outline of our activities on site.

2. Situation in the disaster area at that time

In addition to the devastating damage a giant tsunami in the city Kesenuma located in the northern part of the Miyagi prefecture, caused heavy oil from the oil tanks installed at the entrance of the bay spilled and caught fire. This fire continued to burn for 2 days and spread up to the area where marine product processing factories were located, destroying those almost completely. Further, the Kesenuma shoreline subsided by around 80 cm, so that during high tide the various areas are

submerged knee-deep under water. During our visit to the site we were led to areas where the road used for removing the wreckage had to be raised by several dozen centimeters as a measure against submersion. Wreckage around buildings had already been removed, but the rescue activities did not proceed due to insufficient heavy machinery and personnel (Photo 1). The acquaintance who guided us, stopped his car near a pachinko (vertical pinball game) parlor at the entrance of the bay and explained, that there are still people in there, that have not been rescued. In the vicinity there were also other shops where rescue activities had not yet been carried out and over the entire area hung an intense stench of sludge and other materials (Photo 2).



Photo 1



Photo 2

The refugees in K-WAVE were living on a very limited space and tried to stave off the cold by covering the floor with blue sheets, blankets or corrugated cardboard. Most of the refugees had nothing that could be used to separate their spaces and thus could not maintain any privacy, thus being forced to live in an environment requiring a lot of consideration regarding their surroundings (Photo 3). They had been complaining about unwellness from the beginning of their shelter life. There were also frequent afterquakes strong enough to be felt physically. According to the records of the department for earthquakes and volcanoes of the Meteorological Agency there had been 189 afterguakes with a seismic intensity of more than 1 during the 7 days of our stay. K-WAVE was the refuge providing the best living environment within the Kesenuma city region and supported by a medical team comprised of many volunteers, physicians, nurses and members of the self-defense forces.



Photo 3

Our volunteer activities on this occasion required facilities willing to let us conduct those activities, an understanding of the people on site and their cooperation. Our acquaintance in the affected area served us as mediator, arranging parking space, accommodations and food for us, helped to set up and maintain a treatment booth and devoted his efforts to collect information. Moreover, we were also able to obtain the cooperation of local acupuncturists, enabling us to obtain even more detailed on site information and achieve a still better information exchange regarding the treatment. The additional support we received in form of materials and financial help from various manufacturers of acupuncture and moxibustion products, as well as help from many other people enabled us to conduct our activities.

3. Case report

75-year old woman.

Height 160 cm, weight 50 kg.

Blood pressure 154.0/69.5 mmHg (average)

Chief complaint was low back pain and left knee pain, accompanied by insomnia and constipation as accessory symptoms. Movement of the low back was particularly bad upon rising in the morning and the patient also complained of fatigue and pain of the extremities. She underwent surgery for colon cancer about 2 years earlier. Before the disaster she used take Halcion, to Magmitt, Excelase and similar drugs. She had no experience with acupuncture and moxibustion treatment. Her parents had hypertension. During this earthquake disaster she had been swept away by the tsunami and struggled in the water. When she by accident found something to hold on to, she managed to surface and was miraculously rescued. She reported having had the feeling at that time that her intestines would be squeezed out of her mouth by the water pressure.

1) Treatment

We performed treatment simulations in advance, guided by acupuncture and moxibustion teaching staff employed at the university and acupuncturists who had experience with volunteer

23

guided by acupuncture and moxibustion teaching staff employed at the university and acupuncturists who had experience with volunteer work after the Han - Shin Awaji Earthquake Disaster. Since this patient received acupuncture and moxibustion treatment for the first time and was considered to be weakened by physical and mental fatigue, we tried a treatment using weak stimulation. Details of the treatment and its course were as follows.

First through fourth treatment (April 30 – May 3)
Prone position: scatter pricking of the lumbar region (40 mm, No. 16 needles), retaining needles for 10 minutes at BL22 (50 mm, No. 18 needles)

BL40, BL51, BL56, BL57 (40 mm, No. 16 needles)

Supine position: single short insertions at ST34, SP10, ST36, SP9 (40 mm, No. 16 needles)

Moreover, on May 3 we added a needle retained at GV20 for 10 minutes (40 mm, No. 16 needles).

Fifth treatment (May 4)

Prone position: GV20, GB21, BL22, BL56, BL57, retaining the needles for 10 minutes (50 mm, No. 18 needles), after that scatter pricking Sixth treatment (May 5)

Prone position: GV20, GB21, BL22, BL56, BL57, retaining the needles for 10 minutes (50 mm, No. 18 needles)

Regarding the choice of treatment points for the individual symptoms acupoints for which there is some evidence of their effectiveness for that particular symptom were given priority. Areas likely to be affected like muscle groves or areas of the transition from muscle into tendon, as well as indurations and tender points were also needled (Figure 1). In all cases disposable stainless steel Seirin needles were used.

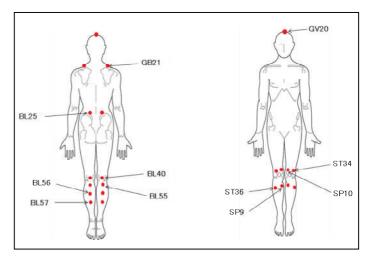


Figure 1

2) Course

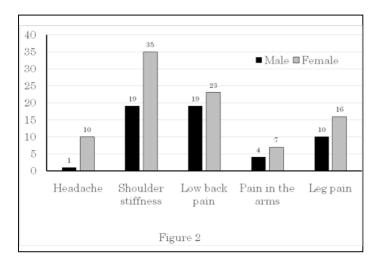
During the first interview we obtained an informed consent from the patients and then carried out a treatment of about 30 minutes. The first to third treatments targeted the chief complaints, while the accessory symptoms were addressed from the fourth treatment onwards. By the sixth treatment the overall condition, her sleep and bowel movements had improved, so that she reported regarding the latter effect a feeling of increased intestinal activity during the treatment. With each additional treatment the rhythm of her movements became smoother and the frequency of her showing a more cheerful expression and using more pleasant conversational topics increased.

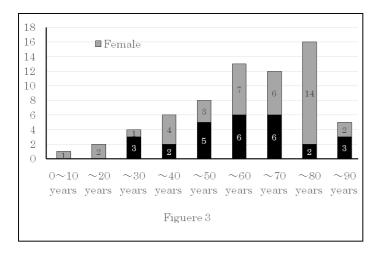
3) Overview of all patients

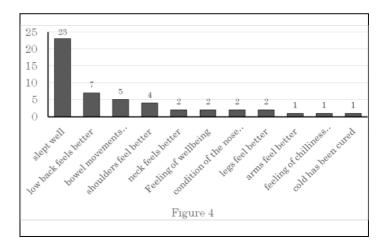
During the 7 days of our stay we treated 69 persons (28 men and 41 women) a total of 196 times with acupuncture and moxibustion. Classified by symptoms men complained more about shoulder stiffness and low back pain, while in women the most frequent symptom was shoulder stiffness (Figure 2). Constipation and insomnia were frequent accessory symptoms. Of the 69 patients 26 have had acupuncture and moxibustion treatment

before, while 40 had no prior experience with it and in 3 the situation was unknown (Figure 3). Among the 26 patients having prior experience with acupuncture and moxibustion treatment there was one 90-year old patient, who had only one acupuncture and moxibustion treatment about 70 years ago. Based on these results we may conclude, that acupuncture and moxibustion is probably not yet really established in the Kesenuma region.

After the treatment 23 patients reported "could sleep well", 7 said "the hip feels much better", 5 reported "I do now have bowel movements", 4 reported a "feeling of relief" of the shoulder stiffness, making the improvement of insomnia the most frequently observed effect. (Figure 4).







4. Discussion

During talks with the patients insomnia and worries caused by the disaster were frequently encountered, so that in many people the presence of a post-traumatic stress disorder (PTSD) was suspected. Afterquakes and the unfamiliarity of cohabitation resulted in psychogenic stress, while the work associated with the restoration led to physical fatigue, or else may also have triggered other symptoms. At K-WAVE the medical care was beginning to be managed mainly by physicians and nursing staff. Yet, there were insufficient means to provide relief from psychosomatic suffering, so that the acupuncture and moxibustion treatment was considered to be extremely helpful not only for the alleviation of pain and fatigue, but also for the provision of mental care.

The acupuncture and moxibustion booth set up within K-WAVE was converted after 6 o'clock in the evening into sleeping quarters for the medical staff and volunteers. We were thus able to obtain some space under these conditions thanks to the understanding and cooperation of the local people. In the face of deteriorating sanitary conditions using disposable needles and trays, hand rub disinfection, finger cots etc. to demonstrate the hygienic nature of our work to establish and improve understanding by

and communication with not only the patients but also the medical staff was both essential and very effective to that end. (Photos 4, 5).



Photo 4



Photo 5-1



Photo 5-2

Photos 6, 7 show the last day of the acupuncture and moxibustion volunteers. We were bid farewell by many grateful patients. One other patient than the one described above told us, seeing his house being washed away in front of his eyes and a tanker riding on top of the current has cast him into darkness (deprived him of the hope of living). Through the conversation during the acupuncture and moxibustion treatment he now reported to have found the light of living again. Finally he thanked us with a heart-felt: "Thank you".



Photo 6



Photo 7

Based on these experiences it seems reasonable to assume, that the volunteer activities on this occasion did not only prove the effectiveness of the acupuncture and moxibustion treatment and the importance of history-taking as a means of collecting information, but the attitude of listening and empathy apparently also contributed to the provision of relief from high stress levels, insomnia, physical and mental pain (Figure 5).

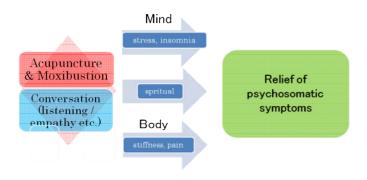


Figure 5

5. Conclusion

Care for victims of the Great East Japan Earthquake suffering from PTSD will remain a task for a long time to come. The volunteer activities on this occasion strongly suggested, that although both pharmacological and psychotherapy are very important for excessive stress, fear, sense of helplessness, flash-backs, sleep disorders etc., there is a high possibility that acupuncture and moxibustion treatment may at the same time offer a major contribution to the relief of PTSD related symptoms.

References

Takasaki R, Otsuki T. A report on acupuncture volunteer activity in Kesen-numa. Ido-No-Nippon (Jpn J Acupunct Manual Ther) 2011; 814: 94-96.

Medical History in Japan

"Historical Significance of the Standardization of Acupoint
Locations", the Second Japanese Acupoint Committee (3)
"Detailed Guide to the Location of Acupoints" from the
calssics to the WHO standardization", pp411-422, Tokyo,
Ishiyaku Publishing, June 2009 (partially revised)
Makoto Mayanagi
Graduate School of Humanities
Ibaraki University

(continued from KAIM Journal vol.6 no.1 and no.2)

5. Acupoint charts up to the Tang period and changes in acupoints

Since acupoints are located on the body surface their visualization through illustrations undoubtedly started from an early point in time. Therefore, the "Ming Tong Illustrations" have probably been drawn around the creation of the original "Ming Tong Jing". Because no directly derived drawings exist, there are no concrete clues, but it can be imagined based on acupoint illustrations up to the Tang period.

The oldest extant text with acupoint charts currently known is the Yellow Emperor's Toad Prohibitions for Moxibustion & Cauterization (Huáng Dì Xiā Má Jing) (Figure 7). Based on the works listed in the Record of the Bibliographic Catalogs of the Sui dynasty it seems likely that the roots were established in the 3rd century. Not surprisingly, similar to the "Ming Tang", these have been scattered and lost in China and have been preserved and handed down only in Japan. The old manuscripts were discovered during the late Edo period by Mototsugu Taki of the Shogunate Medical School. Figure 7 shows a replica of the Shogunate Medical School's copy and names of acupoints along the hairline or Renying (ST9) can be seen. Moreover, it includes a description that like the imaginary toad and rabbit on the moon moxibustion treatment of some acupoints should be avoided in correlation with the waxing and waning of the moon.



Figure 7 Huáng Dì Xiā Má Jing



Figure 8 Ishinpo

In the Heian period Yasunori Tamba compiled the text "Ishinpo" based mainly on works from before the Sui and Tang periods and presented this to the emperor in 984. In the 22nd volume are illustrations for each of the 10 months of pregnancy, for each an illustration of a naked pregnant woman, fetus, viscera and bowels, meridians and acupoints all of which are derived from the Chang Jing. Among these the contents related to the correlation between fetal development and viscera-bowels-meridians originates and has been transmitted from the "Tai Chan Jing" (text on fetuses and birth), placing its origin extremely far into the past. The date of creation of the Chang Jing quoted in the Ishinpo is not clear, but considering the 5th century appears to be acceptable and most likely. Figure 8 shows a reproduction of the "National Treasure Seikido Library [12], but the book of the Seikido library is an associated book that has diverged from the Nakarai's national treasure book during the Edo period. It cannot definitely be concluded, that the red lines indicating meridians are actually derived from the "Chang Jing".

A text with acupoint charts of the Tang period was unearthed in Dunhuang. Figure 9 shows the Stein Text No. 6168 from The British Library in London "Illustrated Moxibustion and is called the Technique" of the "Moxibustion Scripture". Like the Xia Ma Jing no meridians are drawn and only points not used today like "Shou Suikong" or " Wuzhou" have been marked. Also, the Pelliot text No. 2675 [13], which is in the possession of the La Bibliothèque nationale de France, mentions at the beginning a "First Volume of the New Adorned Scripture of Moxibustion for Acute conditions". In other words this texts was a reproduction of the one volume work "Xinxiu Beiji Jiujing" published by the Li family living a business area in the eastern market of the capital (today called Xi'an). On the backside of the paper the second half of this book describes the location of the "human-spirit" elements correlated to the suitability for treatment as regulated by the oriental zodiac signs characteristic of the birth year, seasons, months and days, while at the end there is a transcription of the year 861. Thus, this book shows clearly that during the Tang period prior the year 861 textbooks about moxibustion had already been published in Xi'an. At the same time this is also the oldest extant medical book publishing record.



Figure 9 Stein Text No. 6168 (London, The British Library)

On the other hand, paying attention to the hair style shown in Figures 7-9 reveals that although only Figure 8 shows a woman, all are very much alike. The drawing style of the bodies too is strikingly similar. This shows, that until the Tang period the acupoint charts adopted a standardized style. Also of significance in Pelliot's text No. 2675 there is a large

inscription of "Ming Tang" above the body, revealing that acupoint illustrations have been called "Ming Tang". If that is so, the "Ming Tang Tu" prepared in the third century too was drawn in this style and later presumably followed until the Tang period.

Yet, changes occurred in the acupoints. The points" Shou Suikong" or "Wuzhou 2 shown in Figure 9 are not found in the "Ming Tang", and in Pelliot's text No. 2675 the point GB21 jianjing (肩井) is called bo jing (膊井), the point TE20 jiaosun (角孫) is recored as yin hui (陰会), the point GV23 shengting (神庭) is called zhu shen (住神) and the point between the eyebrows EX-2 yin tang is called guang ming. During the time following the "Ming Tang" too different names for acupoints and new acupoints appeared and different schools and theories using those names continued to be established.

6 Tertiary standardization – unification on a national level

After the Tang period and through a period of 5 generations of confusion, China was reunited under the Northern Sung government, and maybe also due to the emperor's pursuit of a civilian controlled policy, attached great importance to medical policies. On this foundation "Su Wen", "Ling Shu" and similar medical classics were revised, books on herbology also enlarged and revised a large portion of medical encyclopedias newly compiled and using the woodblock printing technique that had spread at that time governmental editions were published. The effects of acupuncture and moxibustion too were acknowledged by the emperor himself, so that he ordered the medical officer Wang Wei Yi to correct the confusion about meridians and acupoints. By imperial command Wei Yi prepared his "Illustrated Meridians" (illustrations and descriptive text) and in

the following year based on that work created a 3-dimensional figure, that was "newly cast" and he revised the 14 meridians and 354 acupoints in 1026, publishing the "Illustrated Meridians" as the 3-volume work "(Newly casted) Tong Ren Shu Xue Shen Jiu Tu Jing [14].

The Northern Song editions of the time used characters of coin size and even B4 paper size large characters, were mostly luxury books for the court and government officials and consequently too expensive for ordinary people or physicians. Therefore, subsequent publishing of small print editions for the general population was common for medical books. Yet, trying to create a small printed version of the "Tong ren shu xue shen jiu tu jing" makes it difficult to contain the bronze figure illustrations. Presumably this seems to have been the reason why there has been no small print edition of this work, but the government had this book carved as a stone relief that was then erected in the capital of Bianjing (today's Kaifeng) and spread by having people make rubbed copies of it. The casting of this bronze figure and publishing of the book, and again the rubbed copies obtained from the stone relief were used as a means for the careful spread of this knowledge and had the purpose of achieving unification on a national level. It is no exaggeration to call precisely this the tertiary standardization.

Incidentally, quotations in the "Xia Ma Jing" or "Ishinpo" derived from the "Chang Jing" or Pelliot text No. 2675 show that the discourse pertaining to the determination of the type of meridian or the acupoints to be avoided depending on the location of the human spirit was very popular until the Tang period. Whether this view already prevailed from the stage of the "Ming Tang" is unknown, but they are referred to twice in the "Illustration of the Brass

Man Acupuncture and Moxibustion". Apparently, the widespread discourse could not be neglected.



Figure 10 Bronze figure (Tokyo National Museum)

Figure 10 shows the bronze figure at the Tokyo National Museum, which had originally been cast in Northern Song and had been called "Tensei dojin". This originates according to Chen cunren theory to the joining of the Japanese army when the allied forces of eight countries attacked Beijing during the Boxer Rebellion and carried it away from the old palace in Beijing. However, Professor Hiroshi Kosoto from Kitazato University showed beyond any room for dispute that this particular bronze figure had been cast by the acupuncture medical officer Jizen Yamazaki upon order from the shogunate during the Edo period by the end of the 18th century and been in the possession of the Edo Medical School [15].

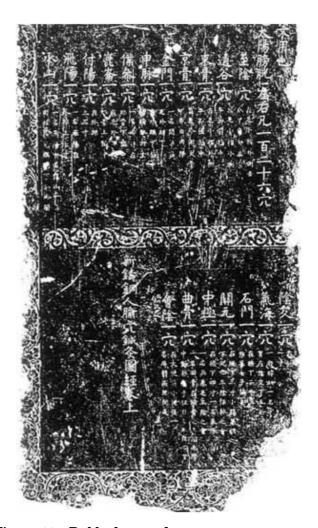
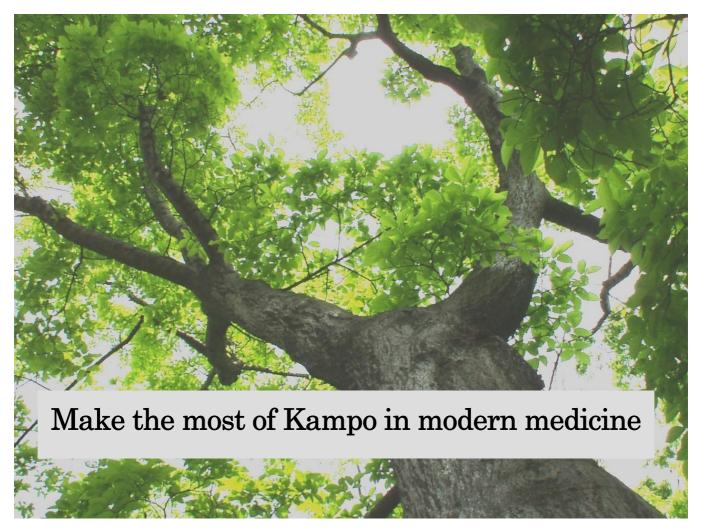


Figure 11 Rubbed copy of a gravestone

Figure 11 shows a rubbed copy of the stone relief immediately after it had been set up in Bianing [16] and "First Volume of the Newly Cast Bronze Figure Illustration of Acupuncture and Moxibustion" is found in the left lower corner. This stone relief was moved during the Yuan period to Beijing and had there been preserved until the Ming period. This particular stone remnant was discovered during excavations at Beijing's castle wall and a portion of it is now on display on the 6th floor of the The Chinese Academy of Sciences in Beijing. Further, the Ming government also completely replicated the Northern Song stone relief because of damage and wear and allowed to make rubbed copies of it to spread the knowledge. The library of the Imperial Household Agency is in the possession of a complete rubbed copy

from the Ming period that originally had been together with the bronze figure shown in Figure 10 in the possession of the Edo Medical School.



Foundation: 1905

A century of tradition ————

We are a manufacturer consistently controlling the entire process from the import of crude herbs to the manufacture of Kampo extracts and as such have contributed to the development of Japanese Kampo.

We sincerely hope to continue in the future with our contribution to

modern medicine through "Kampo".





The crude drugs like many other creatures on earth are raised by bountiful NATURE.

Humankind earns as well grace from Mother Nature and is blessed as a member of natural world.



PROFILE of TOCHIMOTO

Since Tochimoto was appointed as a Japan-China friendship trading firm in 1963, we have expanded our business overseas, mainly with China.

We import a variety of quality-controlled natural resources from all over the world for maintaining wellness.

TOCHIMOTO TENKAIDO CO., LTD.

3-21 Suehiro-cho, Kita-ku, Osaka 530-0053, JAPAN www.tochimoto.co.jp

Kracie

KEEPING PACE WITH THE TIMES, MILD MEDICAL TREATMENT FOR HUMAN



twice or three times a day, possible to select



For more information, please contact

We wish you a healthy living

Kracie Pharmaceutical, Ltd.

20-20, Kaigan 3-chome, Minato-ku, Tokyo 108-8080

http://www.kampoyubi.jp

Printed in Oct.2007



My choice is SEIRIN

What's yours?

For painless acpuncture treatments
I always trust Seirin.
New patients are surprised by its comfort, and my regular clients ask for it by name.

Exceptional Products.

Join the thousands of distinguished professionals who have counted on SEIRIN for over 30 years to provide the highest quality needles for you, and a painless experience for your clients.





No.1(0.16)×30mm 0001ENTS



C € 0121

健康にはり