

Clinical Report (Japan)

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

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1. Introduction

A friend of one of the authors, Takasaki, 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 afterquakes 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 to take Halcion, 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

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 needed (Figure 1). In all cases disposable stainless steel Seirin needles were used.

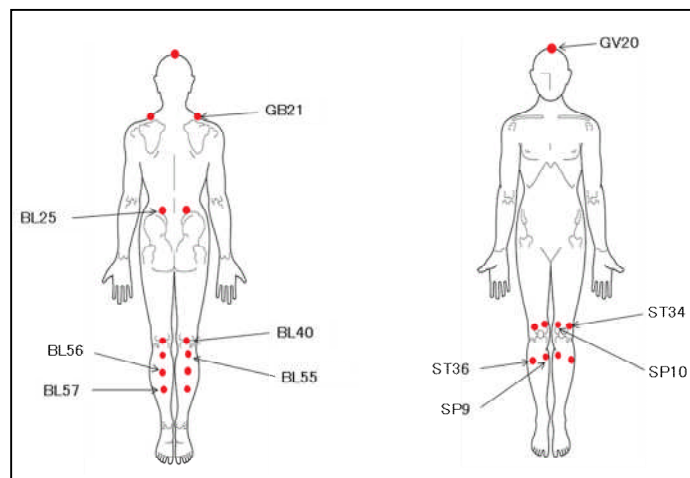


Figure 1

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).

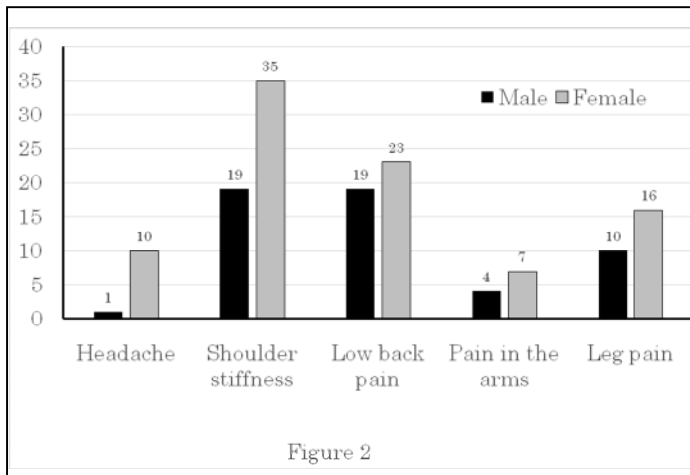


Figure 2

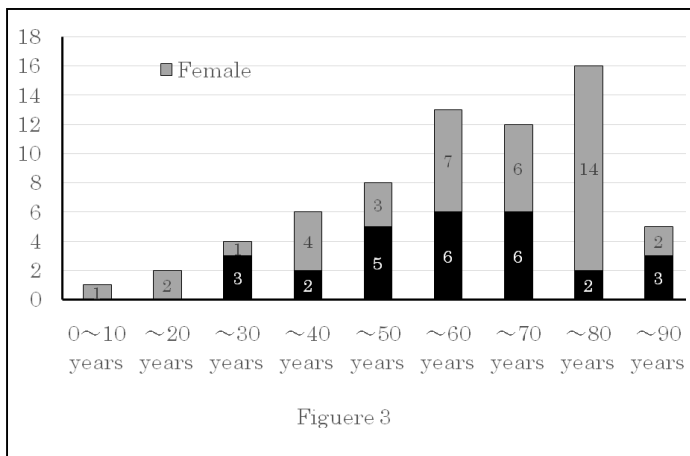


Figure 3

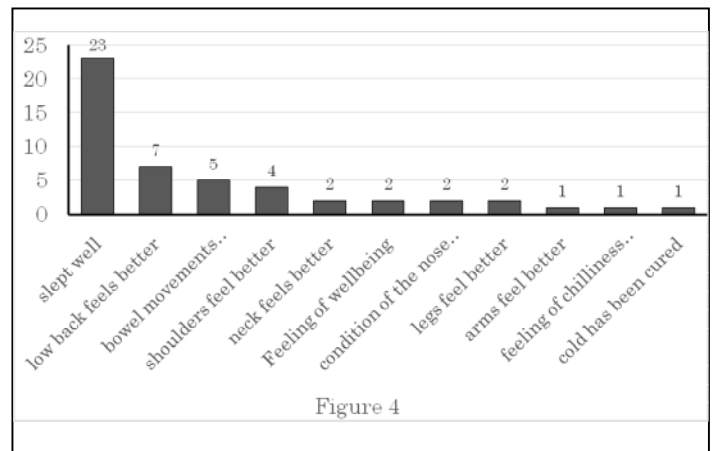


Figure 4

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).

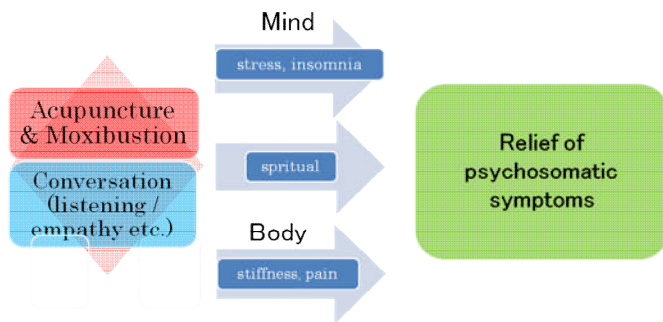


Figure 5

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.