

Clinical Report 1 (Japan)

Acupuncture Treatment for Vertigo

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Vertigo case reports¹⁾

1. Introduction

The "Tokyo Women's Medical University Oriental Medicine Research Active Support System" (below called TOMRASS), developed by Dr. Fumihiko Shirota and his group, has been a focus of attention because the exhaustive and accurate accumulation of clinical facts and analysis of numerous cases contributes to investigations regarding the efficacy of both Kampo and acupuncture & moxibustion treatment modalities as well as the scope their respective indications. This system uses a database built from chief complaints, disease names (names of prescriptions, sites stimulated using acupuncture & moxibustion and stimulation method), anamnesis, findings of tongue, abdominal, pulse and similar diagnostic procedures, oriental medical findings like body type, blood pressure, body temperature and similar general findings as well as hematologic and uranalytic data, that is searchable by setting specific conditions. The above mentioned chief complaints are classified according to the various symptoms, incidence and severity into 5 levels, which the patients are requested to identify themselves during consultations. That is, an "evaluation of subjective symptoms by the patients themselves" allows to identify sequential fluctuations. The SD method (Semantic Differential technique) frequently employed in the field of psychology served as reference for the preparation of this scale.

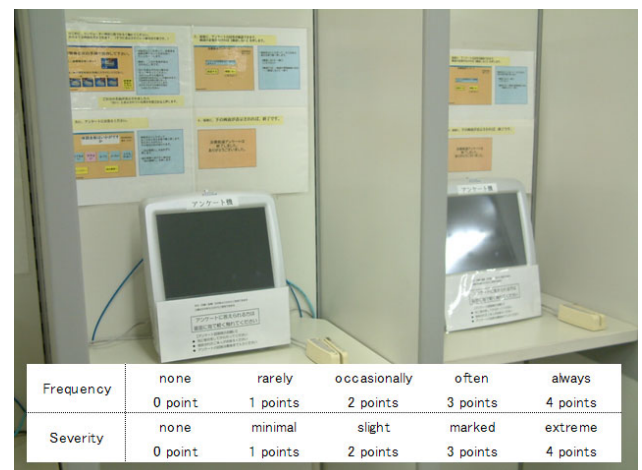
Thus, the TOMRASS is characterized in that it allows to perform cohort research into both the Kampo as well as acupuncture & moxibustion modalities. In the present study we used TOMRASS to conduct a study on outpatients at our oriental medical department presenting with vertigo as their chief complaint in order to investigate the effects of

acupuncture & moxibustion treatment.

2. Methods

The study included 70 patients out of a total of 77 patients, who visited the acupuncture & moxibustion outpatient department of this facility, presenting with either "vertigo" or "dizziness" (including patients who were in continuous treatment) and in whom the vertigo symptoms were evaluated using the TOMRASS more than twice from the start of operation of TOMRASS in May 2001 until June 2006. "Vertigo" was found in 14 patients with an age of 65 ± 8 years (mean \pm SD) and "dizziness" in 56 patients with an age of 54 ± 15 years. The number of treatments for patients with vertigo was 8 : 3-74 (median : range) and for patients with dizziness 8 : 2-126 sessions. The symptoms of vertigo were classified into frequency (none: 0 points, rarely: 1 point, occasionally: 2 points, often: 3 points, always: 4 points) and severity (none: 0 points, minimal: 1 point, slight: 2 points, marked: 3 points, extreme: 4 points) and the patients requested to evaluate their symptoms themselves using these five levels respectively.

During the first consultation a questionnaire is used for this purpose, but from the second visit onwards it is performed in the form of answering questions provided on a touch panel before each treatment (picture 1).



Picture 1 Evaluation of subjective symptoms by the patients themselves

Acupuncture & moxibustion treatment intervals varied widely among individual cases, but administered basically in 1-week intervals. Mainly and most frequently 40 mm long No. 18 and 50 mm No. 18 needles were used for inserting and retaining the needles. For the direct moxibustion a set of 3 half-rice grain sized cones were used most frequently. Acupoints in the order of frequency with which they were used included in the head and neck region Hyakue (GV20; Baihui), Fuchi (GB20; Fengchi), Tenchu (BL10; Tianzhu), Shimo Fuchi (*GB20; lower Fengchi), Kami Tenchu (*BL10; upper Tianzhu), in the abdominal region Chukan (CV12; Zhongwan), Kangen (CV4; Guanyuan), on the back Kensei (GB21; Jianjing), Kanyu (BL18; Ganshu), Hiyu (BL20; Pishu), Jinyu (BL23; Shenshu), on the upper and lower extremities Gokoku (LI4; Hegu), Kyokuchi (LI11; Quchi), Soku Sanri (ST36; Zusanli) and Shokai (KI6; Zhaohai).

3. Results

Examination of the for the 14 patients presenting with "vertigo" classified according to the scores for frequency, severity and frequency + severity shows for the frequency a score from 3 : 0-4 points (median : range) to 1 : 0-3 points, for severity a range from 2 : 0-4 points to 1 : 0-2 points and for the combination frequency + severity a range from 5 : 0-7 points to 2 : 0-4 points. Thus, for each score a significant improvement was observed (Figure 1). For one patient a score of 0 was observed during the first examination. This patient visited for the purpose of vertigo prevention and so the final score too was 0 points.

Examination of the 56 patients presenting with "dizziness" classified according to the scores for frequency, severity and frequency + severity shows for the frequency a score from 2 : 1-4 points (median : range) to 2 : 0-4 points, for severity a range from 2 : 1-4 points to 1 : 0-4 points and for the combination frequency + severity a range from 4 : 2-8 points to 3 : 0-8 points. Thus, for each score a significant improvement was observed (Figure 2).

Examination of the frequency + severity score based on the evaluation criteria listed in Table 1 reveals, like shown in Figure 3, that there were 5 patients (35.7%) reporting improvement, 5 patients (35.7%) slight improvement and 4 patients (28.6%) in whom symptoms remained unchanged, while aggravation was observed in none of the patients (this includes among the 4 patients the above mentioned one patient with an initial and final score of 0 points). On the other hand, among the patients with "dizziness" 25 patients (44.6%) reported improvement, 13 patients (23.2%) slight improvement, 12 patients (21.4%) no change, 6 patients (10.7%) a slight deterioration, while none (0.0%) reported an aggravation. Three of the 5 patients with "vertigo" reporting improvement and 14 among the 25 patients with "dizziness" who reported improvement achieved a final score of 0 points. Therefore the improvement ratio composed of the combined ratio of improvement and slight improvement was thus in any case approximately 70%.

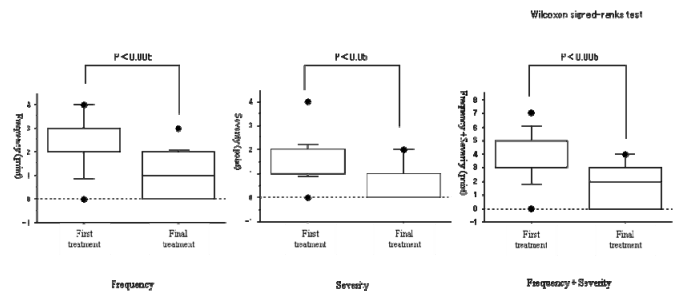


Figure 1 Variations in frequency, severity and frequency + severity of vertigo (n=14)

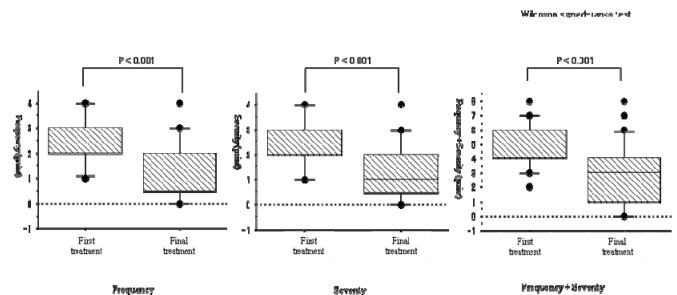


Figure 1 Variations in frequency, severity and frequency + severity of dizziness (n=56)

Improvement	Sample with 0 point score or sample with 3 points improved score for frequency + severity
Slight improvement	Sample with 1 point improved score for frequency + severity
No change	Sample without changed score for frequency + severity
Slight deterioration	Sample with 1 point aggravated score for frequency + severity
Aggravation	Sample with 3 points aggravated score for frequency + severity

Table 1 Evaluation criteria

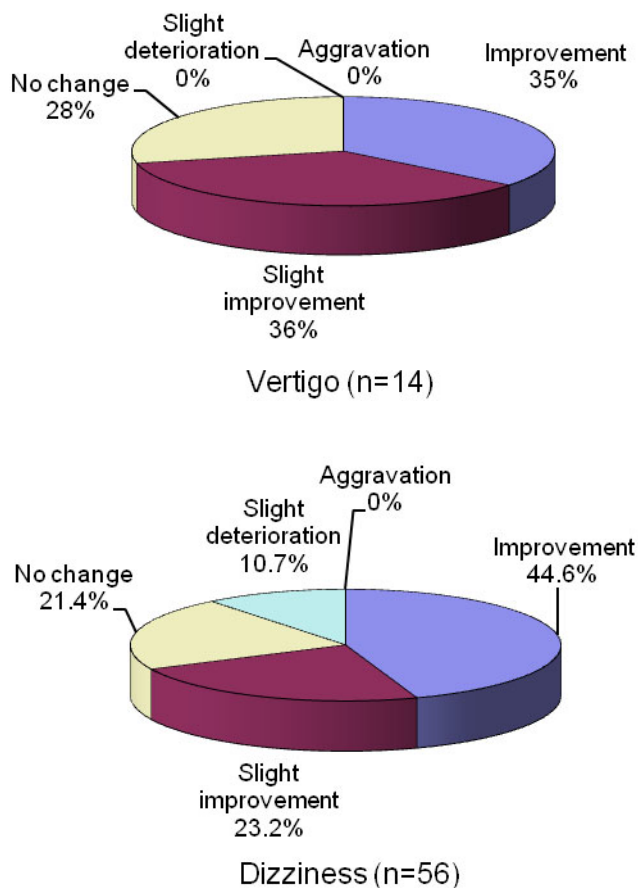


Figure 3 Improvement ratio for vertigo

4. Discussion and conclusion

We examined the effects of acupuncture & moxibustion treatment on vertigo using an evaluation of the subjective symptoms by the patient themselves as indices and found an improvement ratio of approximately 70%, indicating the effectiveness of this treatment modality. Considering that in particular among acupuncture & moxibustion outpatients in whom the

pharmacologic treatment alone may not be very effective, this was thought to be a fairly high improvement ratio. The endpoint in this investigation was defined as the resulting score at the time of the final treatment, but naturally the pathophysiology, number of treatments and treatment duration also need to be taken into consideration and examined separately.

“Introduction of our research facility”

The Tokyo Women's Medical University has developed out of the Tokyo Women's Medical School established in 1900 as the only medical university for women in Japan at that time. In 1984 a study group for Kampo medicine was established within the university and the 'Institute for Oriental Medical Research' affiliated with Tokyo Women's Medical University established in March 1992 around the founding members of this study group. Associated with an expansion of the facility it was moved in December 2007 to its current location in front of Tabata station and its name changed to Tokyo Women's Medical University, Institute of Oriental Medicine (below called 'this institute'). In this institute physicians and acupuncturists perform clinical, research and educational activities.

This institute includes the three sections of a clinic, an acupuncture & moxibustion clinical facility and a facility for health promotion. In the acupuncture & moxibustion clinical facility mainly 4 acupuncturists are engaged in clinics, research and education. The section has 12 beds for acupuncture & moxibustion treatment that are individually separated from each other through partitions (Pictures 2, 3). The number of patients visiting the facility per day varies around 40 persons. Moreover, the facility for health promotion provides the "Kampo health care" programme, integrating Kampo medical and modern medical examination. Within this framework acupuncturists perform Ryodo Raku examinations and offer acupoint guidance. Regarding research, each individual acupuncturist pursues his/her own clinical research and obtained results are then published via the The Japan Society for Oriental Medicine.



Picture 2



Picture 3

Regarding education this university introduced courses about oriental medicine and practical exercises as obligatory subjects in 1992 and among these 2 credits are assigned to acupuncture & moxibustion practice. This was the first time, that a medical university had introduced acupuncture & moxibustion into its curriculum. This attempt has been realized, because the first professor of the department, Dr. Fumihiko Shirota, had placed great emphasis on acupuncture & moxibustion related education similar to the education in Kampo medicine. A questionnaire performed among the students of this medical university following completion of the course showed, that 97.3% reportedly recognized the necessity for acupuncture & moxibustion courses and 96.1% of the students reported, they would recommend acupuncture & moxibustion treatments, thus verifying the high level of interest in the subject²⁾. Since 2005 a system of clinical acupuncture & moxibustion practice has been established and efforts pertaining to postgraduate studies for acupuncturists are made.

References

- 1) Ebiko K: Investigation of the effects of acupuncture & moxibustion on vertigo – using evaluation of subjective symptoms by the patients themselves as an index, *Ido no Nihon*, 756, 42-46, 2006
- 2) Ebiko K, Kikkawa M, Fujii A, Kimura Y, Arai M, Sato H: Attitude survey among medical students pertaining to acupuncture & moxibustion – comprehension and awareness after completion of acupuncture & moxibustion classes; *Journal of The Japan Society for Oriental Medicine* 56 (4), 591-597, 2005