

13. Diseases of the Musculoskeletal and Connective Tissue

Reference

Hirota S, Itoh K, Katsumi Y. Trigger point acupuncture treatment for chronic low back pain in elderly patients. *Meiji Shinkyu Igaku (The Bulletin of Meiji University of Oriental Medicine)* 2006; (38): 19–26. Ichushi Web ID: 2008088212

1. Objectives

To compare the effects of acupuncture at a trigger point (TrP) and a tender point of the same muscle in elderly patients with chronic low back pain.

2. Design

Crossover Randomized controlled trial using sealed envelopes for allocation (RCT- envelope-crossover).

3. Setting

Outpatient Clinic, Department of Orthopedic Surgery, Meiji University of Oriental Medicine Hospital, Kyoto, Japan.

4. Participants

Six elderly people with low back pain for at least 6 months and no abnormal findings on neurological tests, including tests of muscle strength and deep reflex (4 males, 2 females, mean age 66.3±7.9 years).

5. Intervention

Arm 1: Group A. TrP treatment then tender point treatment (n=3).

Arm 2: Group B. Tender point treatment then TrP treatment (n=3).

A TrP was defined as the point in a muscle with cord-like induration that induced pain when the low back or hip joints were moved passively. A tender point was defined simply as a point felt tender in the affected muscle identified in similar way to a TrP. Each treatment was given weekly 3 times, for 2 weeks (total 6 times). In both treatments, stainless steel needles (0.16×40 mm) were inserted into muscle, and retained for 10 minutes, regardless of de qi sensation. In both arms, 8–12 points were stimulated.

6. Main outcome measures

Pain evaluated on a Visual Analogue Scale (VAS) before treatment and one week after each treatment (total 7 times). Roland-Morris Disability Questionnaire (RMDQ) before treatment, and one week after the third and the sixth treatments.

7. Main results

The pre- to post-treatment decrease in VAS pain score was larger in Arm 1, but there was no clear difference between the two treatments. RMDQ scores decreased in both groups, but there was no clear quality of life improvement.

8. Conclusions

TrP and tender point acupuncture are both effective for chronic back pain in the elderly, but the difference in the effectiveness of these treatments was insignificant.

9. From acupuncture and moxibustion medicine perspective

Not mentioned.

10. Safety assessment in the article

Not mentioned.

11. Abstractor's comments

The significance of this study lies in its comparison of TrP treatment with tender point treatment, both common clinical treatments for low back pain, which is the most frequent complaint in acupuncture practice. The study compared two different treatments for the same muscle using a crossover design, based on the design described in a previous study, Hirota S, et al. "A controlled clinical trial comparing trigger point acupuncture with tender point acupuncture for chronic low back pain - a pilot study on 9 elderly patients -. *Zen Nihon Shinkyu Gakkai Zasshi (Journal of the Japan Society of Acupuncture and Moxibustion)* 2006; (56): 68–75 (in Japanese with English abstract) JA0916". Deficiencies include the lack of information about the participant recruitment period, the period and length of the study, and the washout period. In addition, sample size was small, and effectiveness was not thoroughly analyzed statistically. Further, while on one hand the authors mention in the Discussion (and they include references in the bibliography) that a certain degree of practice is required to master trigger point acupuncture therapy, the sole acupuncturist in this study had only had one year of clinical experience. It is hoped that the authors rectify these deficiencies before carrying out further research.

12. Abstractor and date

Shimoichi Y, 11 September 2011.