

13. Diseases of the Musculoskeletal and Connective Tissue

Reference

Furuya E, Nayuki T, Yakame M, et al. Effect of press tack needle treatment on shoulder stiffness. *Zen Nihon Shinkyu Gakkai Zasshi (Journal of the Japan Society of Acupuncture and Moxibustion)* 2002; 52(5): 553–61 (in Japanese with English abstract). Ichushi Web ID: 2003144987

1. Objectives

To evaluate the effect of press tack needle treatment on shoulder stiffness.

2. Design

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

3. Setting

Tokyo Therapeutic Institute, Tokyo, Japan.

4. Participants

A total of 53 teachers and students with awareness of (subjective) shoulder stiffness (15 males and 38 females).

5. Intervention

Arm 1: Press tack needle group. Pyonex needles (Seirin Co., Ltd.; length 0.6 mm) were inserted at up to 4 tender points detected by palpation, and retained for 3 days (n=28).

Arm 2: Placebo press tack needle group. Needles with the same shape as Pyonex and tips removed were used. Stimulation was applied in the same manner as in Arm 1 (n=25).

6. Main outcome measures

Visual analogue scale (VAS) score for shoulder stiffness (evaluated before, immediately after, and 3 days after the treatment) and the number of subjects with “awareness of shoulder stiffness” (based on the Hiro Jikaku-shojo Shirabe [questionnaire on subjective fatigue symptoms], developed by the Japan Society for Occupational Health; evaluated before and 3 days after the treatment).

7. Main results

Comparison of pre- and post-treatment VAS scores revealed significant improvements immediately ($P<0.05$) and 3 days ($P<0.01$) after the treatment in Arm 1, but no significant change in Arm 2. The number of subjects with “awareness of shoulder stiffness” was significantly decreased in Arm 1 compared with Arm 2 ($P<0.01$).

8. Conclusions

Continuous retention of press tack needles improves shoulder stiffness.

9. From acupuncture and moxibustion medicine perspective

The authors mentioned that press tack needle retention may enhance parasympathetic function, and that self-care with press tack needles might be a successful treatment for mibyō (presymptomatic disease).

10. Safety assessment in the article

Adverse events occurred in 5 subjects in Arm 1 (itching in 4 and discomfort in 1) and 4 in Arm 2 (itching in 3 and discomfort in 1), but no one dropped out.

11. Abstractor’s comments

This study is highly valued in that the effect of press tack needle treatment was evaluated in a double-masked trial. But, as all the subjects were teachers or students at the Tokyo Therapeutic Institute, who were likely able to distinguish press tack needles from placebo press tack needles, description about the success or failure of the double masking is needed. This revolutionary study attempted double masking (subject and practitioner masked), which is generally difficult in a clinical study of acupuncture. Future development of this type of study is anticipated.

12. Abstractor and date

Hosaka M, 11 September 2011.