

13. Diseases of the Musculoskeletal and Connective Tissue

Reference

Nabeta T, Kawakita K. Relief of chronic neck and shoulder pain by manual acupuncture to tender points - a sham-controlled randomized trial. *Complement Ther Med.* 2002; 10:217–22. CENTRAL ID: CN-00736622.

1. Objectives

To assess the relief of neck and shoulder pain and stiffness provided by treatment with real acupuncture to tender points.

2. Design

Randomized controlled trial (RCT).

3. Setting

An acupuncture and moxibustion school, Osaka, Japan.

4. Participants

Thirty-four staff and students from an acupuncture and moxibustion school who complained of chronic dull pain and stiffness in the neck and shoulders (20–63 years of age; average ages in the two groups: 34.2 and 30.8).

5. Intervention

Arm 1: Acupuncture to tender points group. The stimulation points were all tender points in the left and right neck, shoulder, and back. Disposable needles (0.2 x 40 mm, Seirin Co., Ltd.) were inserted, then sparrow pecking technique was applied five times to elicit a *de qi* (得氣) sensation. Participants received treatment once a week for three weeks (n=17).

Arm 2: Control group. The stimulation points were all tender points in the left and right neck, shoulder, and back. Needles with rounded tips (sham needles) were used and insertion and sparrow pecking were simulated. Participants received the same number of treatments as in Arm 1 (n=17).

Two participants from Arm 1 and five from Arm 2 withdrew.

6. Main outcome measures

The intensity of the pain in the neck, shoulders, and back, as well as the intensity of the stiffness in the shoulders was rated on a visual analogue scale (VAS). Pain intensities were rated before treatment (at six, four, two days, and immediately before), after each treatment (immediately, then at one, three, and five days after), and after the third treatment (at seven and nine days). Subjects were asked a question about their sensations during real and the sham acupuncture.

7. Main results

VAS scores decreased significantly in Arm 1 immediately after each treatment and one day after each treatment (within the group, $P < 0.01$). Scores subsequently tended to return to baseline level, but differences tended to last longer with successive treatments. Similar tendencies were observed in Arm 2, but they were not statistically significant. No significant differences were observed between the two groups at any point after treatment. Pressure pain thresholds tended to increase with real acupuncture, but not with sham acupuncture. The study managed to mask participants to the intervention.

8. Conclusions

Acupuncture to tender points is effective for chronic neck and shoulder pain and stiffness for a short period.

9. From acupuncture and moxibustion medicine perspective

There is a similarity between tender point sites and acupuncture points.

10. Safety assessment in the article

Not mentioned.

11. Abstractor's comments

The study is well designed. Worth particular mention is that the study compares the effectiveness of acupuncture therapy for neck and shoulder pain and stiffness with a sham acupuncture technique that simulates needle insertion. Also the study succeeded in blinding participants to the interventions.

A recent large-scale acupuncture clinical trial proposed 12 as the standard number of treatments, but there was no significant between-group difference in this study, which means the number of treatments was insufficient. Although the study also mentioned intention-to-treat (ITT) analysis, it is regrettable that the sample size was not designed to assure a particular power. However, using sham acupuncture as a control in clinical trials could be a model for future studies.

12. Abstractor and date

Takahashi N, 3 December 2011.