13. Diseases of the Musculoskeletal and Connective Tissue

Reference

Itoh, K, Katsumi Y, Hirota S, et al. Effects of trigger point acupuncture on chronic low back pain in elderly patients--a sham-controlled randomised trial. *Acupuncture in Medicine* 2006; 24(1): 5–12. Pubmed ID: 16618043

1. Objectives

To compare the effects of trigger point acupuncture versus sham acupuncture on pain and QOL in patients with chronic low back pain.

2. Design

Crossover randomized controlled trial (RCT cross-over).

3. Setting

Meiji University of Oriental Medicine (current Meiji University of Integrative Medicine) Hospital, Kyoto, Japan.

4. Participants

Twenty-six elderly patients aged 65 or older with chronic low back pain for at least 6 months (9 males and 17 females; age range, 65–91 years).

5. Intervention

Arm 1: Group A. Trigger point acupuncture followed by sham acupuncture (n=13).

Arm 2: Group B. Sham acupuncture followed by trigger point acupuncture (n=13).

Trigger point acupuncture: Stainless steel needles (0.2×50 mm; Seirin Co., Ltd.) were inserted to a depth of 10–40 mm at trigger points, and sparrow pecking technique was applied. After the *de qi* (得気) sensation was obtained, the needles were retained for 10 minutes. Sham acupuncture: Similar stainless steel needles (0.2×50 mm; Seirin Co., Ltd.), with blunt tips, were put on trigger points and stimulation was applied. To keep patients blinded, the acupuncturist pretended to insert the needle and to use sparrow pecking technique. After 10 minutes, needle extraction was simulated.

In both arms, one of the two acupuncture treatments (30 minutes) was administered 3 times with a frequency of once weekly (the first phase), followed by a 3-week washout period. Then the other treatment (30 minutes) was administered 3 times with a frequency of once weekly (the second phase), followed by a 3-week observation period. The overall study duration was 12 weeks.

Three patients in Arm 1 and 4 in Arm 2 dropped out.

6. Main outcome measures

Visual Analogue Scale (VAS) score for pain intensity and Roland Morris Disability Questionnaire (RMDQ) score.

7. Main results

Both VAS and RMDQ scores during the first phase were lower in Arm 1 ($P<0.001$ and $P<0.01$, respectively). The within-group (before-and-after) comparison showed that both VAS and RMDQ scores decreased during the trigger point acupuncture phase ($P<0.01$ for both), but remained unchanged during the sham acupuncture phase.

8. Conclusions

Trigger point acupuncture is more effective than sham acupuncture on low back pain in the elderly in the short term.

9. From acupuncture and moxibustion medicine perspective

Treatment at trigger points may be more effective than treatment at traditional acupuncture points on low back pain in the elderly.

10. Safety assessment in the article

One patient experienced worsening of symptoms during the trigger point acupuncture in Arm 1.

11. Abstractor's comments

This very well-designed crossover RCT demonstrated the efficacy of trigger point acupuncture, as compared with sham acupuncture, in the elderly patients with low back pain. Greater reliability and external validity of results would be obtained if the drop-out rate (one quarter in this study) is decreased and intention-to-treat (ITT) analysis is conducted.

12. Abstractor and date

Wakayama I, 11 September 2011.