

13. Diseases of the Musculoskeletal and Connective Tissue

Reference

Miyazaki S, Hagihara A, Kanda R, et al. Applicability of press needles to a double-blind trial. A randomized, double-blind, placebo-controlled trial. *Clinical Journal of Pain* 2009; 25(5): 438–44. CENTRAL ID: CN-00706848

1. Objectives

To evaluate the efficacy of press tack needle (円皮鍼) for low back pain.

2. Design

Double blinded randomized controlled trial (DB-RCT).

3. Setting

Faculty of Sports and Health Science, Fukuoka University, Fukuoka, Japan.

4. Participants

Ninety university students with no experience of acupuncture treatment (recruited between 18 September and 31 October 2007).

5. Intervention

Arm 1: Press tack needle (円皮鍼) group. Press tack needles (Pyonex, 0.2×0.6 mm, Seirin Co., Ltd.) were applied at the left BL23 (腎兪) acupuncture point (n=45).

Arm 2: Placebo group. Identical press tack needles, with only the needle element removed, were applied at the left BL23 (腎兪) acupuncture point (n=45).

Three participants dropped out of Arm 1 and six dropped out of Arm 2.

Participants were subdivided into healthy participants and low back pain participants. Low back pain participants were those with low back pain for several days, low back pain on examination before the intervention, or a six-month or greater history of low back pain. Therefore, Arm 1 (n=42) included nine low back pain participants and 33 healthy participants. Arm 2 included five low back pain participants and 34 healthy participants.

6. Main outcome measures

Low back pain intensity rated on a visual analogue scale (VAS).

7. Main results

Efficacy was greater for low back pain in Arm 1 than Arm 2 ($P=0.03$). The reduction in subjective symptoms was greater among low back pain participants than healthy participants in Arm 1 ($P<0.001$).

8. Conclusions

Treatment with press tack needles is effective for low back pain.

9. From acupuncture and moxibustion medicine perspective

While treatment at BL23 (腎兪) acupuncture point was effective for low back pain, not all treatment should be at this one acupuncture point: clinical therapists need to combine this acupuncture point with others in their treatment.

10. Safety assessment in the article

Only one participant in Arm 1 complained of sleepiness.

11. Abstractor's comments

This is a very well designed double-blind trial. The authors describe in detail how patients were successfully blinded to treatment allocation, inasmuch as the original purpose of the study was to determine whether press tack needle efficacy could be assessed in double-blind trials. It is also commendable that the sample size was calculated

However, the design was somewhat complex because of the subdivision of the two groups into healthy participants and low back pain participants. There was only one outcome measure (VAS score), so inclusion of another measure might have been beneficial. Unfortunately, as the authors mention, follow up ceased at 20 minutes after intervention, so any subsequent effects are unknown. Despite these issues, further development of this research offers promise.

12. Abstractor and date

Wakayama I, 23 September 2011.