13. Diseases of the Musculoskeletal and Connective Tissue

Reference

Nakajima M, Inoue M, Itoi M, et al. A comparison of the effectiveness between acupuncture and local injection for neck pain: a randomized controlled trial. *Zen Nihon Shinkyu Gakkai Zasshi* (*Journal of the Japan Society of Acupuncture and Moxibustion*) 2007; 57(4): 491–500 (in Japanese with English abstract). Ichushi Web ID: 2008024979

1. Objectives

To compare the effectiveness of acupuncture and local injection for neck pain.

2. Design

Randomized controlled trial (RCT).

3. Setting

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

4. Participants

Thirty-three outpatients from the above orthopedic surgery department.

5. Intervention

Arm 1: Acupuncture group. Stainless steel needles (0.18×40 mm, Seirin Co., Ltd.) were inserted to a depth of 10–20 mm, and the sparrow pecking technique (1 Hz, 20 seconds) applied after the *de qi* (得気)sensation was achieved (n=16).

Arm 2: Local injection group. A dibucaine hydrochloride formulation and Neurotropin were injected using a 25 G needle (0.5×25 mm, Terumo Corporation), and then the needle was withdrawn (n=17).

Treatment in both groups was directed to the most painful 3–5 points weekly for 4 weeks.

6. Main outcome measures

Visual analogue scale (VAS) 6-point Neck Disability Index (NDI, Japanese edition) and standardized questionnaire of cervical root disease [developed by Tanaka et al] were measured. They were evaluated before treatment, and 0, 2 and 4 weeks after the end of treatment. Evaluation was masked.

7. Main results

VAS was improved significantly in Arm 1 compared to Arm 2 ($P<0.001$). Both NDI and standardized questionnaire showed significant improvement within group comparison ($P<0.001$).

8. Conclusions

Acupuncture is more useful than local injection for neck pain.

9. From acupuncture and moxibustion medicine perspective

The most painful points were determined to be the treatment points.

10. Safety assessment in the article

No adverse events were reported.

11. Abstractor's comments

This study holds great interest for acupuncture therapists because it compares a Western medical treatment to acupuncture. It is highly commendable for having attempted a randomized controlled trial. However, the objective and the results are inconsistent because the research question is unclear. The quality of the study as an RCT is problematic. It lacks prior sample-size estimates, evaluation of internal validity (random allocation and masking success), and the statistics have not been analyzed appropriately. Within-group comparison and the necessary between-group comparison were made at the same time, which has the potential to give readers a mistaken impression of the results. Accordingly, the conclusions of the study should be recognized as having limitations. The objective of this study is important to clinical acupuncture, so it is hoped that the authors will improve on the points mentioned above by repeating the trial after preparing a thorough pre-trial plan, thereby contributing to the public good.

The material in this study is similar to that in Nakajima et al. Consideration of acupuncture and local injection for neck pain — A randomized controlled trial. *Ido-no Nippon* (*The Japanese Journal of Acupuncture & Manual Therapies*) 2008; 67(10): 116–125. JA0817, Ichushi Web ID: 2008373095 and Nakajima et al. A study of acupuncture and local injection for neck pain — A randomized controlled trial. *Nihon Seitai Denki Butsuri Shigeki Kenkyu Kaishi* (*The Journal of the Japanese Bio-Electrical and Physical Stimulation Research Society*) 2008; 22: 1–6. JA0818, Ichushi Web ID: 2009099691, so they are included in this structured abstract.

12. Abstractor and date

Shichido T, 5 November 2010.