### 13. Diseases of the Musculoskeletal and Connective Tissue

### Reference

Hirota S, Itoh K, Katsumi Y. A controlled clinical trial comparing trigger point acupuncture with tender point acupuncture treatments for chronic low back pain - a pilot study on 9 elderly patients -. *Zen Nihon Shinkyu Gakkai Zasshi (Journal of the Japan Society of Acupuncture and Moxibustion: JJSAM*) 2006; 56(1): 68–75 (in Japanese with English abstract). Ichushi Web ID: 2006156313

### 1. Objectives

To compare the therapeutic effects of trigger point acupuncture with those of tender point acupuncture on chronic low back pain.

### 2. Design

Quasi-randomized controlled trial (quasi-RCT).

## 3. Setting

Department of Orthopedic Surgery, the Meiji University of Oriental Medicine (current Meiji University of Integrative Medicine) Hospital, Kyoto, Japan.

# 4. Participants

Twelve patients with chronic low back pain (mean age,  $71.9 \pm 3.4$  years; range, 66-77).

### 5. Intervention

- Arm 1: Trigger point acupuncture group (n=6). Needling to the trigger point of the muscle for a total of 5 times (once a week).
- Arm 2: Tender point acupuncture group (n=6). Needling to the tender point for a total of 5 times (once a week).

Three subjects dropped out during the study.

### 6. Main outcome measures

Pain intensity (assessed using a visual analog scale: VAS) and functional disability (Roland-Morris Disability Questionnaire: RMDQ).

### 7. Main results

At the end of the treatment course, VAS and RDQ values were significantly improved in Arm 1 (P<0.01), whereas these values tended to be improved (but not significantly) in Arm 2. At one month follow-up, these improvements persisted and remained significant compared with baseline in Arm 1 (P<0.01), but tended to decline and return to baseline in Arm 2.

### 8. Conclusion

Trigger point acupuncture in contrast to tender point acupuncture appears to reduce pain intensity (VAS) and improve disability measures (RMDQ) after a few applications. The results suggest that these two techniques have different therapeutic effects.

## 9. From acupuncture and moxibustion medicine perspective

Not mentioned.

# 10. Safety assessment in the article

Not mentioned.

### 11. Abstractor's comment

This study is a well-designed RCT with clear criteria for inclusion of the participants and sufficient follow-up duration. The difference in the therapeutic effects of the two acupuncture treatments, which are often confused, is of great interest. However, allocation of the patients in this study was dependent on the order of enrollment and therefore only quasi-randomized. Also as the authors mention, it is regrettable that the study design does not permit sufficient validation of masking and placebo effects. The results in this study are limited by the small number of the participants. Furthermore, the results of clinical application may vary depending on the operator's skill. Further studies concerning these issues are awaited to improve reproducibility in clinical practice.

### 12. Abstractor and date

Matsumine R / Kaneko Y, 14 December 2010, Kawakita K / Takahashi N, 25 December 2010.