

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

#### Reference

Kawachi A, Kitade T, Kim M, et al. Combination of SSP therapy and far infrared irradiation for chronic low back pain. *Toyo Igaku to Pain Clinic (Oriental Medicine and the Pain Clinic)* 2006; 36(1): 35–42 (in Japanese with English abstract). Ichushi Web ID: 2007063453

#### 1. Objectives

To evaluate the efficacy of Silver Spike Point (SSP) therapy combined with far infrared irradiation for chronic low back pain.

#### 2. Design

Crossover randomized controlled trial (RCT cross-over).

#### 3. Setting

Not described.

#### 4. Participants

Sixty chronic low back pain patients.

#### 5. Intervention

Arm 1: SSP plus far infrared irradiation group. The same treatment as in Arm 1 plus far infrared ray irradiation at about 30 cm from the skin (n=30).

Arm 2: SSP group. Bilateral low frequency electrotherapy (3 Hz continuous waves for 15 minutes) at BL20 (脾俞) and BL23(腎俞) acupuncture points (n=30).

#### 6. Main outcome measures

Pain intensity after treatment (numerical scale), comfort during treatment (visual analogue scale [VAS] score).

#### 7. Main results

Intensity of chronic back pain after treatment was improved in 83% of patients in Arm 1 and 40% of patients in Arm 2. VAS scores for comfort during treatment were 8.4±0.9 mm for Arm 1, and 7.4±1.2 mm for Arm 2.

#### 8. Conclusions

The addition of far infrared irradiation to treatment with SSP further reduces pain and increases comfort in chronic back pain patients.

#### 9. From acupuncture and moxibustion medicine perspective

The paper mentions selection of acupuncture points from among those commonly used for chronic back pain clinically.

#### 10. Safety assessment in the article

Not mentioned.

#### 11. Abstractor's comments

This trial compares SSP with SSP plus far infrared irradiation. The study measured skin temperature and deep tissue temperature, as well as tissue blood-flow volume, and investigated pain intensity and comfort in low back pain patients. It is of great interest that the study assessed both objective scores and subjective evaluations. However, temperature and blood flow were measured in one group, while clinical effects were examined in the other group, so there is a need for re-examination of the design. Acupuncture points were selected according to symptoms, but the relation between the type of low back pain and the selection of acupuncture points was not discussed. Such a discussion would improve clinical application.

#### 12. Abstractor and date

Furuhata T, Kaneko Y, 1 February 2011.