

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Nam DW, Kim HB, Yang DH, et al. Comparison research of clinical effect of Eastern and Western medical treatment on frozen shoulder patients. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2006; 23(5): 105–13 (in Korean with English abstract).

#### 1. Objectives

To evaluate the efficacy of combined Eastern-Western medical treatments for frozen shoulder (凍結肩).

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

#### 4. Participants

Patients with shoulder pain for 1–12 months, limited active and passive range of motion, inability to lay on the affected side, and night pain were recruited by newspaper advertisement and by Kyung Hee Oriental Hospital for 4 weeks (n=59).

#### 5. Intervention

Arm 1: Eastern medical treatment (acupuncture) (n=22).

Arm 2: Western medical treatment (nerve block treatment) (n=17).

Arm 3: Eastern-Western combined medical treatment (acupuncture + nerve block) (n=20).

Suprascapular nerve block (steroid mixed with 1% lidocaine 5 ml), subacromial injection, and trigger point injection (0.5 – 2 ml topical anesthetic) for Western treatment.

Jianyu (LI15, 肩髃), Jianliao (TE14, 肩髎), Jianjing (GB21, 肩井), and Dong-si (董氏) acupuncture points (Shin-guan and Gyun-joong) twice a week for 4 weeks in acupuncture group.

#### 6. Main Outcome Measures

Pain evaluated on a visual analogue scale (VAS), and range of motion (ROM) including flexion, extension, abduction, and adduction clinically assessed using a goniometer.

#### 7. Main Results

Treatment decreased pain in all groups ( $5.67 \pm 2.14$  in Arm 1,  $7.67 \pm 1.28$  in Arm 3, and  $7.73 \pm 2.14$  in Arm 2). There were significant improvements in abduction, adduction, and flexion, but not extension in Arm 1 and Arm 3 ( $P < 0.05$ ), and in adduction, but not abduction, flexion, and extension in Arm 2 ( $P = 0.018$ ).

#### 8. Conclusions

All three treatments improve frozen shoulder ROM. The Eastern-Western combined treatment markedly improves abduction.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

In the clinic, pain must be reduced before frozen shoulder ROM can be improved. In this study, acupuncture and nerve block separately or jointly were used as treatment. It is very impressive that the improvement in ROM was observable within one month.

#### 11. Abstractor and date

Kim HJ, 17 August 2010.