

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

#### Reference

Nam DW, Lim S, Kim JI, et al. Clinical observation of acupuncture and nerve block treatment for adhesive capsulitis patients. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society) J Korean Acupuncture and Moxibustion Society* 2007; 24(4): 143–55 (in Korean with English abstract).

#### 1. Objectives

To compare the effectiveness of acupuncture and with that of nerve block treatment for adhesive capsulitis.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

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

#### 4. Participants

Patients with movement limitation and pain (the major symptoms of adhesive capsulitis) (n=59, male/female=24/ 35).

#### 5. Intervention

Arm 1: Acupuncture (n=22).

Arm 2: Nerve block (n=17).

Arm 3: 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

Scores on the Constant Shoulder Assessment (CSA), Shoulder Pain and Disability Index (SPADI), ROM, and pain severity measured on a visual analogue scale (VAS). Digital Infrared Thermographic Imaging (DITI).

#### 7. Main Results

Treatment significantly improved CSA ( $P=0.005$ ), SPADI ( $P=0.012$ ), and VAS scores ( $P=0.007$ ), DITI ( $P=0.007$ ), and adduction ( $P=0.01$ ) and extension ( $P<0.001$ ) ROM in Arm 1; CSA ( $P=0.006$ ), SPADI ( $P=0.037$ ), VAS scores ( $P<0.001$ ), DITI ( $P=0.014$ ), abduction ( $P=0.004$ ) and extension ( $P<0.001$ ) ROM in Arm 2; CSA ( $P<0.001$ ), SPADI ( $P<0.001$ ), and VAS ( $P<0.001$ ) scores and abduction ( $P<0.001$ ), adduction ( $P=0.01$ ), and extension ( $P<0.001$ ) ROM in Arm 3. The improvements in pain severity, CSA score ( $P<0.025$ ), and abduction ROM were significantly greater 4 weeks after treatment in Arm 3 than in Arm 1 or Arm 2.

#### 8. Conclusions

The efficacy of combined treatment for adhesive capsulitis is greater than that of nerve block treatment. This study may be used for treatment model development.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

The studies of Nam et al. (*Daehan-Chimgu-Hakhoeji [Journal of Korean Acupuncture & Moxibustion Society]* 2007; 24(6): 113-22 [K070018\_A], 2006; 23(5): 177-85 [K060015\_A]) and Koh et al. (*Daehan-Hanui-Hakhoeji [J Korean Oriental Medicine]* 2007; 28(1): 11-24) had similar clinical trial designs and objectives, and showed effectiveness of acupuncture and nerve block co-treatment. In clinics using Western medical treatment, when a concomitant therapy is found to be more effective than single drug treatment, it is widely adopted. It is expected that these co-treatments will be adopted.

#### 11. Abstractor and date

Kim HJ, 17 August 2010.