

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

#### Reference

Kim KH, Lim HH, Hwang HS, et al. The study of effect and safety related to Dong-gi acupuncture (DGA) and complex therapy on lumbago due to blood stasis and sprain. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2002; 19(3): 107–14 (in Korean with English abstract).

#### 1. Objectives

To evaluate the safety and efficacy of Dong-gi (動氣) acupuncture (DGA) for lumbago due to blood stasis and sprain.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

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

#### 4. Participants

Patients with lumbago due to blood stasis and sprain (n=97).

#### 5. Intervention

Arm 1: Active Dong-gi acupuncture (DGA) + Drug treatment + Physiotherapy (n=37).

Arm 2: Passive Dong-gi acupuncture (DGA) + Drug treatment + Physiotherapy (n=15).

Arm 3: Simple acupuncture + Drug treatment + Physiotherapy (n=45).

The low back and hip joint in DGA groups were flexed or extended actively or passively (by machine) during acupuncture treatment.

Acupuncture needles were applied to local acupuncture points in the low back area plus BL40, BL65 in Arm 3.

In all patients, herbal medicines and physical therapy were prescribed according to their symptoms.

#### 6. Main Outcome Measures

Severity of pain and range of motion rated as either excellent, good, fair, or bad; levels of serum glutamic oxaloacetic transaminase (SGOT), serum glutamic pyruvic transaminase (SGPT), gamma-glutamyl transpeptidase (gamma-GTP), blood urea nitrogen (BUN), and serum creatinine.

#### 7. Main Results

Active DGA, passive DGA, and simple acupuncture reduced severity of pain and increased range of motion in 97%, 87%, 89% of patients, respectively. In no case did the severity of pain increase, or the range of motion decrease, between the first and final examinations. Blood tests in 34 subjects revealed no change SGOT, SGPT, and gamma-GTP levels in 33 subjects, abnormally high SGOT, SGPT, and gamma-GTP levels at the first visit in only 1 subject, and no significant change in BUN and creatinine levels in all 34 subjects.

#### 8. Conclusions

Combined treatment with Dong-gi acupuncture is effective and safe for lumbago due to blood stasis and sprain.

#### 9. Safety assessment in the article

There was no adverse effect on pain, range of motion, and liver and kidney function during treatment.

#### 10. Abstractor's comments

In this study, lumbago was limited to lumbago due to blood stasis and sprain. Moreover, the criteria, source of pain, and how range of motion was measured were not defined. Randomization is not mentioned specifically. But liver and kidney function (which is not generally evaluated in acupuncture studies) had an important role in this study.

#### 11. Abstractor and date

Kim HJ, 17 August 2010.