

13. Diseases of the Musculoskeletal and Connective Tissue

References

Yamamoto H, Umeda T, Kibi N, et al. Clinical effects of acupuncture for osteoarthritis of the knee 3 — a randomized, controlled trial. *Kansai Iryo Daigaku Kiyo (The Bulletin of Kansai University of Health Sciences)* 2009; 3: 36–40 (in Japanese with English abstract). Ichushi Web ID: 2010044483

Yamamoto H, Umeda T, Kibi N, et al. Clinical effects of acupuncture for osteoarthritis of the knee 2 — a randomized, controlled trial. *Kansai Iryo Daigaku Kiyo (The Bulletin of Kansai University of Health Sciences)* 2008; 2: 48–52 (in Japanese). Ichushi Web ID: 2008334853

Yamamoto H, Umeda T, Kibi N, et al. Clinical effects of acupuncture for osteoarthritis of the knee — a randomized, controlled trial. *Kansai Iryo Daigaku Kiyo (The Bulletin of Kansai University of Health Sciences)* 2007; 1: 41–5 (in Japanese). Ichushi Web ID: 2008048659

1. Objectives

To evaluate the clinical effects of acupuncture treatment for knee osteoarthritis (OA).

2. Design

Randomized controlled trial (RCT).

3. Setting

Acupuncture Clinic, Kansai University of Health Sciences, Osaka, Japan.

4. Participants

Thirty-five patients aged at least 50 years and diagnosed with knee OA between October 2005 and July 2008.

5. Intervention

Arm 1: Acupuncture group. Acupuncture treatment for one month after two weeks of no treatment (n=17).

Arm 2: Placebo acupuncture group. Simulated acupuncture treatment for one month after two weeks of no treatment (n=18).

In the acupuncture group, needles were retained at the SP10 (血海), LR8 (曲泉), SP9 (陰陵泉), ST34 (梁丘), ST36 (足三里), GB34 (陽陵泉), SP6 (三陰交), KI3 (太谿), GB39 (懸鐘), BL60 (崑崙) acupuncture points for 15 minutes twice a week. In the placebo acupuncture group, insertion of needles was simulated at the same acupuncture points as Arm 1, twice a week.

One patient dropped out in Arm 2.

6. Main outcome measures

The Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC).

7. Main results

The pre- to post-treatment decrease in WOMAC score was significant in Arm 1 (mean difference: -8.1, 95% CI, -3.1–13.2, $P=0.004$) and in Arm 2 (mean difference: -7.9, 95% CI, -3.2–12.6, $P=0.003$).

8. Conclusions

Both acupuncture and placebo acupuncture are effective.

9. From acupuncture and moxibustion medicine perspective

The acupuncture for knee osteoarthritis was performed using the Berman method (2004).

Reference: Berman BM, et al. *Ann Intern Med* 2004; 141(12): 901–10.

10. Safety assessment in the article

The authors reported no adverse events.

11. Abstractor's comments

The subject recruitment period and conditions of this study overlap with those in the preceding two studies (Yamamoto H, et al. 2007, Yamamoto H, et al. 2008), and the interventions and outcome measures are virtually identical, so they can be treated as a series of studies. The authors can be highly commended for using an RCT design; however, although the therapeutic effects in both groups were found to be significant, there was no significant between-group difference. This is not mentioned in the Results, but in the Discussion. It is possible that different sample size calculations may have resulted in different outcomes. Weaknesses of the study, including analysis of the success or failure of subject masking, should be improved. Future clinical studies by these authors will hopefully be larger and utilize more appropriate protocols.

12. Abstractor and date

Takahashi N, 25 December 2010.