13. Diseases of the Musculo Skeletal System and Connective Tissue

Reference

1. Objectives
To evaluate the effect of Tai Chi Qigong (太極氣功) on the quality of life of patients with knee osteoarthritis.

2. Design
Randomized controlled trial (RCT).

3. Setting
HwaSeong City Health Center, Republic of Korea.

4. Participants
Patients diagnosed with knee osteoarthritis defined as over grade II on the Kellgren-Lawrence Scale (n=44).

5. Intervention
Computer-generated balanced block randomization was used for a 2:1 (Arm 1:Arm 2) allocation of participants.
Arm 1: Tai Chi Qigong treatment (n=29)
Arm 2: Just observation (n=15)
Tai Chi Qigong treatment: twice a week, 18 movements per round (1 hour) for 8 weeks (total 16 rounds).
Among 44 subjects enrolled, 3 subjects dropped out (1 in Arm 1, 2 in Arm 2).
Reasons for dropping out: conflict with professional activities (n=1), move to another place (n=1), no reason (n=1).

6. Main outcome measures
Health status (Short Form 36 [SF-36] score); physical functioning (Western Ontario and McMaster Universities Osteoarthritis Index [WOMAC] score, elapsed time to walk 6 meters). Pretreatment measures were compared to posttreatment measures.

7. Main results
Treatment significantly increased overall SF-36 score in Arm 1 compared to Arm 2 (64.4±20.9 vs. 55.1±17.5, P=0.010), as well as the mental (P=0.018) and physical (P=0.030) subscores, and significantly decreased the WOMAC pain subscore (–2.2±4.1 vs. 0.2±1.8, P=0.030) and walking time (5.9±1.0 vs. 6.7±1.8, P=0.005). However, there was no significant between-group difference in overall WOMAC score (20.8±18.7 vs. 28.5±19.6, P=0.086).

8. Conclusions
Eight weeks of Tai Chi Qigong helps relieve symptoms and improves quality of life in patients with knee osteoarthritis.

9. Safety assessment in the article
Not mentioned.

10. Abstractor’s comments
The study process as well as the number of drop-outs and reasons for dropping out were clearly described in a flowchart. Moreover, intent-to treat analysis was used to obtain an unbiased estimate of treatment efficacy. There was no blinding in this study, which is a limitation, due to the characteristics of the Tai Chi Qigong treatment. The SF-36 scores and 6-m walking time (but not WOMAC score) provided clear evidence of improvement.

11. Abstractor and date
Kim JI, 24 June 2010.