Acupuncture in patients with osteoarthritis of the knee or hip: a randomized, controlled trial with an additional nonrandomized arm.


Institute for Social Medicine, Epidemiology, and Health Economics, Charité University Medical Center, 10098 Berlin, Germany. claudia.witt@charite.de

OBJECTIVE: To investigate the effectiveness of acupuncture in addition to routine care, compared with routine care alone, in the treatment of patients with chronic pain due to osteoarthritis (OA) of the knee or hip. METHODS: In a randomized, controlled trial, patients with chronic pain due to OA of the knee or hip were randomly allocated to undergo up to 15 sessions of acupuncture in a 3-month period or to a control group receiving no acupuncture. Another group of patients who did not consent to randomization underwent acupuncture treatment. All patients were allowed to receive usual medical care in addition to the study treatment. Clinical OA severity (Western Ontario and McMaster Universities Osteoarthritis Index [WOMAC]) and health-related quality of life (Short Form 36) were assessed at baseline and after 3 months and 6 months. RESULTS: Of 3,633 patients (mean +/- SD age 61.8 +/- 10.8 years; 61% female), 357 were randomized to the acupuncture group and 355 to the control group, and 2,921 were included in the nonrandomized acupuncture group. At 3 months, the WOMAC had improved by a mean +/- SEM of 17.6 +/- 1.0 in the acupuncture group and 0.9 +/- 1.0 in the control group (3-month scores 30.5 +/- 1.0 and 47.3 +/- 1.0, respectively [difference in improvement 16.7 +/- 1.4; P < 0.001]). Similarly, quality of life improvements were more pronounced in the acupuncture group versus the control group (P < 0.001). Treatment success was maintained through 6 months. The changes in outcome in nonrandomized patients were comparable with those in randomized patients who received acupuncture. CONCLUSION: These results indicate that acupuncture plus routine care is associated with marked clinical improvement in patients with chronic OA-associated pain of the knee or hip.