

## **Acupuncture treatment for chronic knee pain: a systematic review**

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**Objectives:** To evaluate the effects of acupuncture on pain and function in patients with chronic knee pain

**Methods:** Databases were searched for relevant studies in June 2006. Two authors independently selected studies in which participants were adults with chronic knee pain or a diagnosis of osteoarthritis or osteoarthritis of the knee; the intervention was a course of body acupuncture treatment defined as the insertion of solid needles into the body for therapeutic purposes; the comparison groups received either sham ('placebo') acupuncture, other sham treatments, no additional intervention, or an active intervention; outcomes investigated included pain or function. Criteria were applied for adequate acupuncture and 'true sham' controls. Study validity was assessed using a modification of a previously published instrument. A meta-analysis was conducted to combine the results of studies which used WOMAC scores and provided sufficient data.

**Main outcome measures:** Patient assessed pain and function, short and long term.

**Results:** Thirteen RCTs were included in the review, of which eight used adequate acupuncture and WOMAC outcomes and were included in the meta-analysis. Six of these had validity scores of more than 50%. Combining five studies in 1334 patients, acupuncture was superior to sham acupuncture for improving both pain and function. The differences were significant at both short and long term follow up. Acupuncture was also superior to no additional treatment (usual care) though these studies showed marked heterogeneity.

**Conclusion:** Acupuncture that meets criteria for adequate treatment is significantly superior to sham acupuncture for treatment of chronic knee pain. However, because of heterogeneity between studies, more research is required and should focus on optimising acupuncture, measuring long-term effects, comparing acupuncture with other recommended non-pharmacological interventions, and evaluating the economic consequences in normal clinical practice.