## Acupuncture treatment for chronic knee pain: study by Hinman et al underestimates acupuncture efficacy

Hinman *et al*<sup>1</sup> completed a Zelen design clinical trial for acupuncture in patients with chronic knee pain and concluded that neither laser nor needle acupuncture conferred benefit over sham for pain or function in patients older than 50 years with moderate or severe chronic knee pain. We disagree with the authors' conclusion because they failed to use the most effective treatment regimen in their trial.

We consider that their treatment regimen is suboptimal for the following reasons.

First, the dosage of acupuncture is far from adequate. The protocol specified the acupuncture intervention as a 20 min treatment once or twice weekly for 12 weeks, with 8-12 sessions in total permitted.<sup>1</sup> Treatment compliance was not reported. Even assuming full compliance, the study participants received only 0.67-1.0 session weekly, to a total of 160-240 min in 12 weeks. This was a smaller dose than was given in the treatment regimen in the trial by Witt et  $al_1^2$  in which participants received 12 sessions of 30 min duration administered over 8 weeksthat is, an average 1.5 sessions weekly and 360 min in total for only 8 weeks. It is worth pointing out that Witt *et al* reached a positive conclusion, the opposite to Hinman *et al*.

Second, the study protocol did not require *de qi* (a well-recognised acupuncture sensation), which is widely regarded as a prerequisite for acupuncture treatment efficacy.<sup>3</sup>

Third, the paper did not follow the CONSORT statement of acupuncture<sup>4</sup> which requires details of needling such as needle manipulation, depth of needle insertion and points selected (unilateral, bilateral or both).

Fourth, the dose of laser acupuncture was only 0.2 J per acupuncture point, which is considered too low to achieve a clinical effect.<sup>5</sup> Evidence already existed in 2009 which suggested that the minimum dose should probably be 0.5 J per point.<sup>5</sup>

Thus it is difficult to evaluate whether an effective treatment regimen was compared against the sham. Since the efficacies of acupuncture and laser acupuncture therapy depend on the dose of the intervention, it seems premature to reach the conclusion that acupuncture is not effective in the treatment of osteoarthritis pain of the knee.

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