Acupuncture More Effective for OA Than Usual Care

Clinical Question: In patients with osteoarthritis of the knee, does acupuncture provide a clinically important benefit as compared with usual care?

Bottom Line: Acupuncture produces a demonstrable effect on osteoarthritis pain and measures of function. The benefit may be an intrinsic effect of acupuncture or be due to the placebo effect, but in any case patients reported feeling better in both the short term and the long term. (LOE = 1a-)


Synopsis
To conduct this meta-analysis, the researchers searched 3 databases for articles comparing acupuncture with sham acupuncture or usual care or a waiting list control group. Two studies used sham therapy (superficial needle placement) that could have had a therapeutic effect. The authors included all languages in their search but did not attempt to find unpublished studies or use a "snowballing" approach to identify studies from the citation list of retrieved articles. They identified 11 studies, 9 that included data that could be combined. Two researchers independently selected studies and abstracted the data.

To combine the results, the researchers used the standardized mean difference (SMD), which allows for the comparison of different rating scales but is hard to apply to clinical care. For clinical relevance, they used an SMD of at least 0.39 for pain and 0.37 for function on the Western Ontario-McMaster Universities Osteoarthritis Index (WOMAC). They compared results of high-quality studies with the overall result and did not find a difference. There was some evidence of publication bias.

Over the short term (approximately 6 weeks), acupuncture did not produce a clinically relevant improvement in pain or function scores as compared with sham acupuncture (SMD = .35 for each), although both results were statistically significant. Long-term assessment did not show a benefit of acupuncture. However, as compared with usual care or patients on a waiting list, scores were clinically relevant with acupuncture, both in the short term and after 6 months. The differences seen between acupuncture and usual care/waiting as compared with acupuncture and sham therapy may be because the sham treatment actually had a therapeutic effect, or the patient expectations added to the effect of acupuncture.