those who do not respond simply have dyspepsia and treat them symptomatically.

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Acupuncture in the Treatment of Fibromyalgia

Berman BM, Ezzo J, Hadhazy V, Swyers JP. Is acupuncture effective in the treatment of fibromyalgia? J Fam Pract 1999; 48:213-8.

Clinical question **Is acupuncture effective in the treatment of fibromyalgia?**

Background Fibromyalgia is a common cause of chronic diffuse pain. The syndrome is most common in women aged 20 to 60 years, with a prevalence of between 2% and 5%. At least two thirds of patients with fibromyalgia use at least 1 complementary modality of treatment, such as herbal supplements or acupuncture. Tricyclic antidepressants have been shown to have limited benefit in fibromyalgia; most complimentary modalities, however, have not been subjected to rigorous clinical testing. The authors performed a systematic review to evaluate the benefit of acupuncture for patients with fibromyalgia.

Population studied Seven studies were identified and summarized. The average patient age ranged from 39 to 51 years, with women comprising the majority of patients. Most patients had previous treatment with tricyclic antidepressants. The mean disease duration varied from 6 and 12 years.

Study design and validity This was a well-executed systematic review of the literature, with an emphasis on randomized controlled trials and prospective cohort studies. The authors used a wide variety of conventional, specialized, and alternative medical databases to identify studies reporting the effect of acupuncture on fibromyalgia. The methodologic quality of the randomized and cohort studies was evaluated by using a predefined validated scoring system. The authors identified 7 studies, 3 of which were randomized controlled trials. One of the randomized controlled trials received a high-quality score; those investigators had performed sham acupuncture in the control group to reduce bias. The other 2 lower-quality randomized controlled trials did not adequately blind patients or report their randomization process. None of the 3 prospective cohort studies controlled for potential confounding factors. The retrospective cohort study was considered the least suitable because of its nonblinded survey format.

Outcomes measured In the one high-quality study, pain threshold, number of analgesic tablets taken during the previous week, regional pain score, visual analog pain scale, sleep quality, morning stiffness, and patients' and physicians' global subjective ratings were all used as end points. Outcomes in the 6 other studies included pain relief, range of motion, anxiety, depression, and even serum substance P.

Results In the one high-quality study, Deluze and colleagues[1] randomized patients with fibromyalgia to either real or sham electroacupuncture. Exclusion criteria covered severe concomitant disease, opioid use, or past acupuncture treatments. Six sessions of electroacupuncture were scheduled during which patients had needles inserted along common anatomic points. In control patients, researchers placed needles approximately 20 mm away from the predesignated sites and used a lower electrical current. This study found significant differences in pain relief, pain threshold, morning stiffness, and global subjective ratings of both patients and physicians. An intention-to-treat analysis showed that 42% of patients had no benefit; 39% had satisfactory benefit; and 19% had an unexpectedly large benefit. Only 3% of the sham group reported such an unexpectedly large benefit. This study evaluated patients immediately after the 3-week course of therapy and lacked longer-term follow-up. It was noted that 8% of the withdrawals from the trial were because of an exacerbation of fibromyalgia brought on by the acupuncture. The other trials and cohort studies, while limited, were consistent with these findings.

Recommendations for clinical practice **This systematic clinical review summarized all the studies that attempted to assess the use of acupuncture in fibromyalgia. They identified one high-quality study that found short-term clinical benefit to acupuncture, but there is no information on outcomes after 3 weeks. The other studies, while consistently reporting a benefit to acupuncture, were inadequate for drawing meaningful clinical conclusions. Additional well-designed studies are needed to confirm these results.**

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