

Acupuncture Stops Pain Finding At Tufts University

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Acupuncture is effective for the treatment of knee osteoarthritis, low back pain, and fibromyalgia. Tufts University School of Medicine (Boston, Massachusetts) researchers conducted a meta-analysis of 16 medical reviews and 11 randomized controlled clinical trials and determined that acupuncture is safe and effective for the treatment of these conditions. They add that there is considerable evidence that acupuncture produces pain relieving effects by stimulating nerves that trigger the body's natural opioid systems.

The Tufts University researchers also note that fMRI (functional magnetic resonance imaging) studies "demonstrate that acupuncture has regionally specific, quantifiable effects on relevant structures and restoration of the balance in the connectivity of the human brain implicated in descending pain modulation, and altered pain-related attention and memory." [1] The researchers note that acupuncture is a "safe and reasonable referral option" for patients with knee osteoarthritis and chronic lower back pain." [2] They note that the scientific data also indicates that patients suffering from fibromyalgia experience relief from acupuncture treatments.

The Tufts University researchers looked at a variety of scientific investigations. They note that a 2019 study of "high-quality evidence" from 246 randomized controlled clinical trials and 12 systematic reviews indicates that acupuncture is effective for the treatment of pain due to knee osteoarthritis. [3] Another meta-analysis in 2017 of 17 investigations also finds acupuncture effective for knee pain relief, even when compared with standard care and other treatment

modalities. [4] Additional quality studies were cited as evidence and acupuncture outperformed placebo controls and active interventions. The research team notes that there is “substantial evidence” demonstrating that six or more acupuncture sessions provide knee osteoarthritis pain relief “when compared with Western medicine or sham acupuncture.” [5]

At HealthCMi (Healthcare Medicine Institute), we feature acupuncture continuing education course materials for the treatment of knee osteoarthritis, including the course entitled Knee Pain. The course is valid for 18 CEUs, including special subcategory acupuncture CEU requirements in states such as Texas, Florida, and California. The course highlights standard knee treatments, using acupoints such as Hedong and Xiyan. The continuing education course also features specialized acupoints such as Xixia (Hsi Hsia), which are used for the treatment of knee osteoarthritis, ACL tears, and patellar tendinitis.

Significant evidence indicates that acupuncture benefits patients with fibromyalgia. The researchers note that when acupuncture is administered 1–2 times per week over a period of 4–13 weeks, there are significant improvements, including less pain and other symptoms associated with the disorder. One of studies in the meta-analysis found that “serum serotonin and substance p values” improved after eight acupuncture treatments. [6]

The researchers note that four additional placebo controlled studies demonstrate that acupuncture significantly provides improvement in functional capacity, quality of life scores, and depression levels for fibromyalgia patients. They add that a 2019 meta-analysis of twelve randomized controlled clinical trials confirms the results. That study concludes that acupuncture is more effective than medications for the relief of fibromyalgia related pain, both in the short-term and long-term. Learn more in the HealthCMi acupuncture CEU course entitled Fibromyalgia.

The greatest body of scientific evidence reviewed by the researchers was on the topic of lower back pain. The researchers reviewed a large number of studies completed over the last two decades. In the last five years, seven overviews of approximately 300 randomized controlled trials “consistently demonstrated that acupuncture provides short-term clinically relevant benefits for pain relief and functional improvement when compared with sham or placebo, standard care, or other types of controls.” [7] Not a single study reported any serious adverse effects associated with acupuncture treatment. Learn more in the acupuncture continuing education course entitled Low Back Pain.

One study determined that acupuncture potentially reduces the need for opioids for back pain patients. [8] Another study determined that acupuncture is a cost-effective treatment modality for patients with chronic lower back pain. [9] The researchers note that the American College of Physicians formally recommends acupuncture as a first-line treatment modality for lower back pain. [10] They add that this recommendation and evidence based conclusions are consistent with the January 2020 inclusion of acupuncture for the treatment of lower back pain in the USA Centers for Medicare & Medicaid Services coverage, which allows for 12–20 acupuncture treatments. [11]

The researchers conclude that an integrative medicine approach to the treatment of musculoskeletal pain improves patient outcomes. The Tufts University researchers note, “Emerging evidence from clinical studies suggests that acupuncture is a safe and effective treatment for patients with pain of origin.” To learn more, try HealthCMi online courses and browse our news department for more research.

References:

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[9] Lorenc A, Feder G, MacPherson H, Little P, Mercer SW, Sharp D. Scoping review of systematic reviews of complementary medicine for musculoskeletal and mental health conditions. *BMJ Open.* 2018;8(10):e020222.

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