

# Migraines, Tension-Type Headaches Respond to Acupuncture

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January 23, 2009 — Acupuncture is at least as effective as prophylactic drugs for migraine and may also benefit some patients with frequent tension-type headache, 2 large reviews conclude.

"The data suggest that in about half of patients, acupuncture decreases the frequency of migraine or frequent tension-type headache by about 50%, which is quite similar to other effective treatments for these disorders," lead reviewer Klaus Linde, MD, from the Center for Complementary Medicine Research at Munich Technical University, in Germany, told *Medscape Psychiatry*. Compared with drug treatments, acupuncture has fewer side effects, although some patients are adverse to needle insertion," he added. Perhaps surprisingly, the reviews found similar benefits in migraine patients from true acupuncture and sham acupuncture, where needles were placed in incorrect locations or did not penetrate the skin, suggesting needle placement is not critical for these patients. "Putting a needle in the wrong place may still have some physiologic effect on the body," review author Andrew Vickers, MD, from Memorial Sloan-Kettering Cancer Center, in New York, told *Medscape Psychiatry*. The reviews are published online January 21 in the *Cochrane Database of Systematic Reviews*.

## Acupuncture Commonly Used

Tension-type headaches are typically bilateral and mild to moderate in intensity, whereas migraine headaches are characterized by recurrent attacks of mostly one-sided, severe headache, typically with nausea and/or sensitivity to light and sound. According to the authors, back pain and arthritis are the most common conditions treated by acupuncture, followed by chronic headache and migraine. Use of acupuncture varies by country. In the United States, a 2002 national survey revealed that 4.1% of Americans had used acupuncture at some time in their lives, and almost 10% of acupuncture users had been treated for migraine or headache. In Germany, a similar 2002 survey revealed 8.7% of adults received acupuncture treatments in the previous year. So far, social health insurance in that country covers the costs of acupuncture for chronic low back pain and osteoarthritis of the knee, but not for headache.

## Acupuncture and Migraine

According to the first review, most patients with migraine can be adequately managed by treating acute attacks. However, patients with frequent, poorly controlled migraine need prophylactic intervention. Drugs such as propranolol, metoprolol, flunarizine, valproic acid, and topiramate are effective in reducing migraine frequency in some patients, but the drugs' adverse effects often lead patients to stop taking them. A 2001 review of studies of acupuncture for migraine found promising but insufficient evidence to support it as standard treatment. To determine the effectiveness of acupuncture for treating migraine in studies up to 2008, investigators examined 22 randomized controlled trials with 4419 participants who had been diagnosed with migraine with or without aura. The studies were at least 8 weeks long and compared acupuncture prophylaxis with routine care (acute treatment), sham acupuncture, or another intervention. Six trials, including 2 large trials with 401 and 1715 patients, which compared acupuncture prophylaxis with acute care, found that after up to 4 months of acupuncture, patients had fewer headaches. Of these 6 trials, 1 showed the beneficial effects of treatment continued at 9-month follow-up. In 14 trials that compared true acupuncture vs sham acupuncture, patients in both groups had fewer migraines, but pooled data analysis did not show true acupuncture was superior to sham acupuncture for any outcome. In 4 trials that compared acupuncture with proven prophylactic drug treatments, patients reported greater improvements and fewer adverse effects with acupuncture. "Collectively, the studies suggest that migraine patients benefit from acupuncture, although the correct placement of needles seems to be less relevant than is usually thought by acupuncturists," the authors write.

## Acupuncture and Tension-Type Headache

In the second review article, investigators examined the effectiveness of acupuncture for tension-type headaches.

tension-type headaches typically occur infrequently and are adequately treated by over-the-counter medications. However, in some patients, the headaches are frequent (from 1 to 15 days a month) or chronic (15 or more days a month). Analgesic drugs or nonsteroidal anti-inflammatory drugs can be used to treat pain from tension-type headache episodes of up to 10 days a month, and guidelines recommend antidepressants such as amitriptyline for chronic tension-type headaches. A 2001 review of acupuncture for idiopathic headache was inconclusive. To investigate the effectiveness of acupuncture for reducing the frequency of tension-type headache in studies up to 2008, the investigators examined 11 trials with 2317 participants. Two large trials investigated whether adding acupuncture to basic care, which involved treatment of acute headache with painkillers, was superior to basic care alone. The studies found significant short-term benefits (up to 3 months) associated with adjunctive acupuncture therapy. The number of headache days was reduced by at least 50% in 47% of patients who received acupuncture plus basic care. In patients who received basic care alone, 16% experienced a 50% reduction in the number of headache days. Six trials comparing true acupuncture with sham acupuncture found the number of headache days was reduced by at least 50% in 50% of patients who received acupuncture but only in 41% of patients who received sham acupuncture, a small but significant difference.

"The available evidence suggests that acupuncture could be a valuable option for patients suffering from frequent tension-type headache," the authors write.

### Another Treatment Option

If headaches are not too frequent (up to 2 migraine attacks per month and up to 8 days of mild tension-type headache per month), treatment with analgesics should be sufficient. Relaxation or biofeedback can also be helpful, said Dr. Linde. However, if headaches are more frequent and are not well controlled, prophylactic treatment is indicated. In migraine, this typically consists of drugs such as beta blockers, calcium antagonists, or other drugs such as topiramate or valproate. "Acupuncture seems similarly or possibly even more effective and has fewer side effects than medication, but it requires more contact time with a provider. So acupuncture is 1 option in more severe or frequent headaches," he said.

Available data suggest that for migraine or for frequent tension-type headache, 8 to 12 acupuncture sessions that are typically 20 to 30 minutes long should produce an effect that lasts about 6 months and possibly longer.

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