

Acupuncture found helpful in easing arthritis pain

Large scientific study validates effectiveness of ancient Chinese art

By Erika Niedowski
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In the largest study of acupuncture to date, researchers have found the 2,000-year-old Chinese treatment can supplement traditional therapies to help relieve pain and improve function in patients with arthritis of the knee.

Patients who had 23 sessions of acupuncture over six months reported significantly better knee function by the eighth week of treatment and a marked decrease in pain by the 14th week.

The results of the trial, published today in the journal *Annals of Internal Medicine*, validate, at least to some extent, what many Americans already believe: Acupuncture works.

Though the study tested the treatment only for osteoarthritis of the knee, other research is under way to determine whether acupuncture can help relieve other types of pain.

"Conventional medicine doesn't have all the answers," said Dr. Brian M. Berman, director of the Center for Integrative Medicine at the University of Maryland School of Medicine and the study's lead investigator.

"The drugs that we have — they often don't provide adequate pain relief. They may have some side effects," he said. "We need to have more 'poly-therapies,' not just one magic bullet."

Past studies of acupuncture as a treatment for osteoarthritis have involved far fewer patients and produced inconsistent results.

A survey by the U.S. Centers for Disease Control and Prevention released in May found that more than a third of adults use some form of complementary, or nonconventional, medicine, ranging from acupuncture to special diets to herbal remedies.

A 1998 study by Harvard University estimated that Americans made more than 5 million visits to acupuncturists a year.

Flow of energy

The ancient treatment involves the insertion of needles at various points on the body which, according to Chinese practitioners, connect to pathways known as "meridians." They believe these meridians conduct energy, or qi (pronounced CHEE), and that acupuncture improves the energy's flow.

Mainstream science offers a different theory: Piercing the skin with needles, researchers say, might stimulate the nervous system to release certain neurotransmitters that regulate the per-

ception of pain.

"Acupuncture seems to produce a cascade, starting in the spinal cord and working up through higher levels of the brain," said Richard L. Nahin, senior adviser for scientific coordination and outreach at the National Center for Complementary and Alternative Medicine, which funded the study.

Said Dr. Marc C. Hochberg, head of rheumatology at Maryland's School of Medicine and a study co-investigator: "We think that acupuncture is having an effect on either the mechanism of — or perception of — pain."

This trial involved 570 patients, ages 50 and older, with arthritis in one or both knees.

Some were taking over-the-counter drugs known as non-steroidal anti-inflammatories, such as Advil or Motrin. Others were taking COX-2 select inhibitors, such as Vioxx or Celebrex, both of which recently have been linked to increased risk of heart attack.

One group received acupuncture — twice a week during the first two months and less frequently as the study went on. Another group received treatment simulating acupuncture but delivered with fake needles. A third group got only information on how to manage arthritis.

After eight weeks, the researchers found, patients receiving acupuncture had greater improvement in function compared with both other groups. By the 14th week, they reported a significant decrease in pain.

The positive effects on those who remained in the trial — a quarter of participants in both the true and simulated acupuncture groups dropped out — continued through the end of the 26-week study.

"I think what happens is you do get this cumulative effect," said Berman, the lead investigator.

Osteoarthritis, the most common form of arthritis, afflicts more than 20 million people in the United States and is one of the most frequent causes of disability in adults. About half of people 65 and older suffer from it, according to Hochberg.

"Any increment of improvement for such a large number of patients is globally very, very important for people in this country, as well as people around the world," said Dr. Stephen I. Katz, director of the National Institute of Arthritis and Musculoskeletal and Skin Diseases.

One study participant, Helene Brightwell of Baldwin, who has arthritis in both knees, said

she used to feel discomfort even while taking over-the-counter pain relievers one or more times a day. The pain was particularly bad when she stepped on the clutch to shift gears in her BMW.

"I went in with a completely open mind," said Brightwell, an information technology specialist at the Social Security Administration who is in her 50s. "I didn't want to have to go to surgery. I didn't want to have to be on lifelong drugs. Acupuncture seemed a good way to go."

The treatment made her feel so much better, she said, that she stopped taking her medication altogether.

"It was a miracle worker for me," she said.

Study participant Jacqueline Abt, a nurse from Ellicott City also in her 50s, likewise stopped using her over-the-counter Motrin during the study. She said the acupuncture not only relieved her pain, but also improved her mobility — to the point where she began doing water aerobics.

"It went from more of a dull, continuing pain to intermittent and then to relief from the pain," said Abt.

Welcome recognition

Acupuncturists said yesterday that the study's findings did not surprise them.

"My betting is that the results would be even better if the treatments were designed uniquely for each individual," said Robert M. Duggan, president of the Tai Sophia Institute in Laurel, which trains students in a variety of nontraditional treatments, including acupuncture.

Diane Kane, an acupuncturist in Baltimore, said science is beginning to validate the age-old Chinese practice. "There's some recognition in the scientific community that acupuncture has some healing effects," she said.

The result, she said, could mean more interest from patients — and more referrals from doctors. "If something is validated with scientific research, then they feel more confident in referring for acupuncture," she said.

Researchers stressed that acupuncture is not a cure for arthritis, but rather a safe and effective therapy that can complement existing treatments.

"We need to find effective pain relief with therapies that have low-risk side effects," said Berman. "Our study applied good science to an ancient therapy."