

Acupuncture is gaining new traction—and respect—in hospitals and doctors' offices as evidence of its curative power piles up. Here, why it works—and what conditions it's best for.

By Laurie Tarkan, Prevention



Virginia Ginsburg, 35, of Santa Monica, CA, didn't put much stock in acupuncture. So when she woke up one morning in September 2009 with pain in her back and leg so excruciating that she could barely walk, she begged her husband to take her to the emergency room. She was diagnosed with sciatica, given a shot of morphine and some pain pills, and sent limping home. But after a few days, when the pain hadn't abated, she remembered how acupuncture had eased her morning sickness when she was pregnant. "I was skeptical that it could help with a more serious condition, but I didn't know where else to turn," she says. So she called the acupuncturist again.

The results astonished her. After just one treatment, the agony began to subside. She went to two or three sessions a week and, after 10 weeks, she was completely pain free.

Stories like Ginsburg's have become increasingly common over the past few years. Marilyn Burack, 52, of Livingston, NJ, says she was cured of vertigo in two sessions of acupuncture after 6 months of medications had failed her. Rhalee Hughes, 38, of New York City, found that just one treatment could stop a flare-up of the pinched nerve in her neck. And similar accounts are told by many of the more than 3 million Americans who have turned to the 2,500-year-old Asian technique to relieve osteoarthritis, back pain, migraines, nausea, hot flashes, anxiety, addiction, insomnia, and infertility.

Western doctors are taking notice.

"More people in the medical community are embracing acupuncture because they see it works—often in cases where conventional medicine hasn't been as effective," says Geovanni Espinosa, ND, the director of the Integrative Urology Center at NYU Langone Medical Center. An estimated 1,500 US physicians are now trained in acupuncture. And some hospitals even have acupuncturists on staff, who tote their needle kits into cancer and orthopedic wards.

What's behind this wave of acceptance is more than treatment trendiness. As reports of acupuncture's potency accumulate, researchers have discovered more evidence about how the technique functions—and the conditions for which it's most effective.

[What's behind your back pain? The first step of pain management is understanding the cause.](#)

The Burden Of Proof

Licensed acupuncturists point to a 2,500-year history as confirmation that the practice works. The concept that traditionally underlies acupuncture (or needling, as it's sometimes called) is that the human body has 12 meridians along which energy—called qi (pronounced chee)—flows. When these channels are "blocked" or "unbalanced," it's thought, the result is illness and pain. To unblock and balance qi, an acupuncturist inserts needles at strategic points along the meridians and their tributaries.

But for Western doctors and researchers, this explanation does not rise to the level of objective proof. As a result, "there has been an explosion of study on the bio-mechanisms of acupuncture over the last ten years, showing

complex, verifiable responses in the brain, nervous system, and connective tissue," says Arya Nielsen, PhD, senior attending acupuncturist in the department of Integrative Medicine at Beth Israel Medical Center in New York City. One recent review named more than 20 scientifically established benefits of acupuncture, from increasing the effects of painkilling endorphins to boosting immune function to releasing anti-inflammatories (which reduce swelling and help healing).

The latest research focuses on the connective tissue that runs under the skin, between muscles and organs. "We suspect that this tissue may be involved in the transmission of the signal from the needle to the brain," says researcher Helene Langevin, MD, professor of neurology at the University of Vermont College of Medicine. As it turns out, the meridians that acupuncturists use to "unblock energy" actually line up with the areas of the body where needles can most easily reach this deep connective tissue. It is possible that in ancient China, acupuncturists mapped out the meridians by palpating connective tissue situated in depressions or "channels" between muscles, she says.

Despite mounting evidence, a major area of inquiry has been whether acupuncture's effectiveness can be explained away by the placebo effect—meaning that needling works only because patients believe that it will. In tests, researchers have compared "real" acupuncture with "sham" (using toothpicks or very short needles or placing needles at "inactive" points). Many—but not all—of these studies found that both versions provide some relief, but acupuncture experts claim the studies have several flaws.

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First, they argue, there's no such thing as faking acupuncture—inserting a needle, no matter where or how deeply, provokes an effect in the body. Even more significantly, one University of Michigan study used brain imaging to find that the two procedures affect brain chemistry differently. Real treatments triggered the release of pain-relieving endorphins and increased the number of endorphin receptors in the brain. In contrast, the sham therapy merely produced more endorphins—without changing receptor number. Finally, science has started to recognize the legitimacy of the placebo in medicine. "Expectations, the relationship between doctors and patients, and the attention a patient is given all can improve the outcome of any treatment," says Brian Berman, MD, professor of family and community medicine and director of the University of Maryland Center for Integrative Medicine. "But it's only been recently that conventional doctors have acknowledged that the mind does have some power in the process of healing."

While the debate rages, patients are finding real relief. Below, the areas where acupuncture has proven most potent, along with the science explaining why.

Pain

More than a dozen studies over the past decade have shown that acupuncture is more valuable than conventional care for treating osteoarthritis of the knee and lower-back pain, says Dr. Berman. It has also been shown to reduce migraine symptoms as well as medications do.

Digestive Issues

Acupuncture was acknowledged as an antidote to vomiting and nausea in 1997 by a National Institutes of Health consensus panel. "The treatment releases calming neurotransmitters, such as serotonin and dopamine, and it reduces stress hormones," says Alex Moroz, MD, an acupuncturist and director of the Integrative Musculoskeletal Medicine Program at the Rusk Institute of Rehabilitation Medicine at NYU Langone Medical Center. These neurotransmitters can quiet your nervous system and induce sleepiness but may also soothe digestion, Dr. Espinosa says. Furthermore, needling relaxes muscle contractions in the stomach, found a study from Duke University School of Medicine. There is some indication that it can also help treat heartburn.

Chemo Side Effects

Recent studies show that acupuncture not only relieves nausea and pain in patients going through chemotherapy but also helps ease neurological symptoms such as dizziness and prickly or tingling skin. What's more, it may improve survival outcomes by enabling patients to stick to their grueling treatments.

Acupuncture is also being used to mitigate the effects of ongoing pain, fatigue, depression, and weakened immune systems. In addition to its other healing capabilities, it sparks the release of immune-system cells and stimulates production of fibroblasts, connective tissue cells that help heal wounds.

Hot Flashes

Acupuncture is thought to regulate the vasomotor system (the portion of the nervous system that controls blood vessel diameter), which affects blood pressure, heart rate, and dilation of blood vessels—all of which play a role in your body overheating. In one study, acupuncture reduced hot flashes by 50%, and the benefits lingered for 3 months after the acupuncture was completed.

Stress, Anxiety, And Mild Depression

Acupuncture works to counteract the fight-or-flight stress response by releasing calming, feel-good neurotransmitters such as endorphins and reducing stress hormones like cortisol. It also improves blood circulation, which oxygenates the tissues and cycles out cortisol. These effects soothe worry and ease sadness.

[How chronic stress can affect your health.](#)

But Does It Hurt?

One of acupuncture's biggest obstacles to acceptance has been how off-putting many Americans find the idea of being pierced with needles. But patients generally agree that the experience is more nurturing than nerve-racking.

Case in point: Susan Heinle, 53. A few months ago, she was on her stomach in the Maplewood, NJ, clinic of acupuncturist Chris Butler. She'd been suffering from symptoms of chronic Lyme disease, including pain in her hips, legs, and back, plus migraines.

Butler targeted a spot on her back with his finger and inserted a super thin, flexible needle about an inch and a half long, then deftly gave it two quick twists and a tap to "stimulate" it. He repeated the process about a dozen times on her back and legs.

Before her first session, Heinle says, "I pictured big needles, like at the doctor's office, and imagined each insertion would be horrifically painful." In reality, she let out only a few mild "ouches."

"It shouldn't be painless," explains Butler. "You should feel an achy sensation for a few seconds."

After 30 minutes, Butler removed the needles, and Heinle left feeling energized—and migraine free.

[Is your pain due to arthritis? Why even patients in their 30s are discovering they're at risk.](#)

Finding a Good Acupuncturist

A doctor's referral or friend's recommendation is a good place to start. If you don't have either, check nccaom.org, the site of the National Certification Commission for Acupuncture and Oriental Medicine. Make sure to look for:

A state license

An acupuncturist doesn't have to be a physician but should have a license. Requirements vary by state, but include between 2,000 and 3,000 hours of training (usually a 3-to 4-year master's degree program) and a series of written exams at one of the more than 65 accredited US acupuncture schools. Note: Doctors who practice acupuncture don't have to have a state acupuncture license but are required by the American Board of Medical Acupuncture to have 300 hours of training and 2 years of clinical practice, and to pass an exam.

Specialization

Acupuncturists may have areas of expertise, such as pain management, orthopedics, urology, or neurological issues.

Reasonable rates

Costs for an hour-long session typically range from \$60 to \$120. An acute problem may require two or three sessions a week for a few weeks; a chronic issue, one or two sessions a week for 8 weeks or more.

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Acupuncture's Several Styles

Acupuncture originated in China, but other Eastern countries adapted and altered the basic techniques. The major distinctions are these:

Chinese

This tends to be the strongest strain (meaning practitioners twirl the needles more), so you're more likely to feel a mild ache where the needle is inserted.

Japanese

The needles are usually finer than those used by Chinese acupuncturists and are placed more shallowly, so there's little discomfort.

Korean

The points practitioners use can vary by nation, and Korean acupuncturists often work only on a patient's hand, using tiny needles, to spark effects throughout all parts of the body.