

backgrounder

Acupuncture: An Introduction

Acupuncture is among the oldest healing practices in the world. As part of traditional Chinese medicine (TCM), acupuncture aims to restore and maintain health through the stimulation of specific points on the body. In the United States, where practitioners incorporate healing traditions from China, Japan, Korea, and other countries, acupuncture is considered part of complementary and alternative medicine (CAM).

Key Points

- Acupuncture has been practiced in China and other Asian countries for thousands of years.
- Scientists are studying the efficacy of acupuncture for a wide range of conditions.
- Relatively few complications have been reported from the use of acupuncture. However, acupuncture can cause potentially serious side effects if not delivered properly by a qualified practitioner.
- Tell your health care providers about any complementary and alternative practices you use. Give them a full picture of what you do to manage your health. This will help ensure coordinated and safe care.

About Acupuncture

The term “acupuncture” describes a family of procedures involving the stimulation of anatomical points on the body using a variety of techniques. The acupuncture technique that has been most often studied scientifically involves penetrating the skin with thin, solid, metallic needles that are manipulated by the hands or by electrical stimulation.

Practiced in China and other Asian countries for thousands of years, acupuncture is one of the key components of traditional Chinese medicine. In TCM, the body is seen as a delicate balance of two opposing and inseparable forces: yin and yang. Yin represents the cold, slow, or passive principle, while yang represents the hot,

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excited, or active principle. According to TCM, health is achieved by maintaining the body in a “balanced state”; disease is due to an internal imbalance of yin and yang. This imbalance leads to blockage in the flow of qi (vital energy) along pathways known as meridians. Qi can be unblocked, according to TCM, by using acupuncture at certain points on the body that connect with these meridians. Sources vary on the number of meridians, with numbers ranging from 14 to 20. One commonly cited source describes meridians as 14 main channels “connecting the body in a weblike interconnecting matrix” of at least 2,000 acupuncture points.

Acupuncture became better known in the United States in 1971, when New York Times reporter James Reston wrote about how doctors in China used needles to ease his pain after surgery. American practices of acupuncture incorporate medical traditions from China, Japan, Korea, and other countries.

Acupuncture Use in the United States

The report from a Consensus Development Conference on Acupuncture held at the National Institutes of Health (NIH) in 1997 stated that acupuncture is being “widely” practiced—by thousands of physicians, dentists, acupuncturists, and other practitioners—for relief or prevention of pain and for various other health conditions. According to the 2007 National Health Interview Survey, which included a comprehensive survey of CAM use by Americans, an estimated 3.1 million U.S. adults and 150,000 children had used acupuncture in the previous year. Between the 2002 and 2007 NHIS, acupuncture use among adults increased by three-tenths of 1 percent (approximately 1 million people).

Acupuncture Side Effects and Risks

The U.S. Food and Drug Administration (FDA) regulates acupuncture needles for use by licensed practitioners, requiring that needles be manufactured and labeled according to certain standards. For example, the FDA requires that needles be sterile, nontoxic, and labeled for single use by qualified practitioners only.

Relatively few complications from the use of acupuncture have been reported to the FDA, in light of the millions of people treated each year and the number of acupuncture needles used. Still, complications have resulted from inadequate sterilization of needles and from improper delivery of treatments. Practitioners should use a new set of disposable needles taken from a sealed package for each patient and should swab treatment sites with alcohol or another disinfectant before inserting needles. When not delivered properly, acupuncture can cause serious adverse effects, including infections and punctured organs.

Status of Acupuncture Research

There have been many studies on acupuncture’s potential health benefits for a wide range of conditions. Summarizing earlier research, the 1997 NIH Consensus Statement on Acupuncture found that, overall, results were hard to interpret because of problems with the size and design of the studies.

In the years since the Consensus Statement was issued, the National Center for Complementary and Alternative Medicine (NCCAM) has funded extensive research to advance scientific understanding of acupuncture. Some recent NCCAM-supported studies have looked at:

- Whether acupuncture works for specific health conditions such as chronic low-back pain, headache, and osteoarthritis of the knee
- How acupuncture might work, such as what happens in the brain during acupuncture treatment
- Ways to better identify and understand the potential neurological properties of meridians and acupuncture points
- Methods and instruments for improving the quality of acupuncture research.

Finding a Qualified Practitioner

Health care providers can be a resource for referral to acupuncturists, and some conventional medical practitioners—including physicians and dentists—practice acupuncture. In addition, national acupuncture organizations (which can be found through libraries or Web search engines) may provide referrals to acupuncturists.

- **Check a practitioner’s credentials.** Most states require a license to practice acupuncture; however, education and training standards and requirements for obtaining a license to practice vary from state to state. Although a license does not ensure quality of care, it does indicate that the practitioner meets certain standards regarding the knowledge and use of acupuncture.
- **Do not rely on a diagnosis of disease by an acupuncture practitioner who does not have substantial conventional medical training.** If you have received a diagnosis from a doctor, you may wish to ask your doctor whether acupuncture might help.

What To Expect From Acupuncture Visits

During your first office visit, the practitioner may ask you at length about your health condition, lifestyle, and behavior. The practitioner will want to obtain a complete picture of your treatment needs and behaviors that may contribute to your condition. Inform the acupuncturist about all treatments or medications you are taking and all medical conditions you have.

Acupuncture needles are metallic, solid, and hair-thin. People experience acupuncture differently, but most feel no or minimal pain as the needles are inserted. Some people feel energized by treatment, while others feel relaxed. Improper needle placement, movement of the patient, or a defect in the needle can cause soreness and pain during treatment. This is why it is important to seek treatment from a qualified acupuncture practitioner.

Treatment may take place over a period of several weeks or more.

Treatment Costs

Ask the practitioner about the estimated number of treatments needed and how much each treatment will cost. Some insurance companies may cover the costs of acupuncture, while others may not. It is important to check with your insurer before you start treatment to see whether acupuncture is covered for your condition and, if so, to what extent. (For more information, see NCCAM’s fact sheet *Paying for CAM Treatment* at nccam.nih.gov/health/financial/.)

Definitions

Complementary and alternative medicine (CAM): A group of diverse medical and health care systems, practices, and products that are not presently considered to be part of conventional medicine. Complementary medicine is used **together with** conventional medicine, and alternative medicine is used **in place of** conventional medicine.

Meridian: In traditional Chinese medicine, a channel or pathway through the body along which qi flows. Practitioners use acupuncture points to reach the meridians and affect the flow of qi.

Qi: In traditional Chinese medicine, the vital energy or life force proposed to regulate a person's spiritual, emotional, mental, and physical health and to be influenced by the opposing forces of yin and yang.

Traditional Chinese medicine (TCM): A whole medical system that originated in China. It is based on the concept that disease results from disruption in the flow of qi and imbalance in the forces of yin and yang. Practices such as herbs, meditation, massage, and acupuncture seek to aid healing by restoring the yin-yang balance and the flow of qi.

Yin and yang: The concept of two opposing yet complementary forces described in traditional Chinese medicine. Yin represents cold, slow, or passive aspects of the person, while yang represents hot, excited, or active aspects. A major theory is that health is achieved through balancing yin and yang and disease is caused by an imbalance leading to a blockage in the flow of qi.

References

- Acupuncture. Natural Standard Database Web site. Accessed at <http://www.naturalstandard.com> on June 28, 2007.
- Barnes PM, Powell-Griner E, McFann K, Nahin RL. Complementary and alternative medicine use among adults: United States, 2002. *CDC Advance Data Report* #343. 2004.
- Berman BM, Lao L, Langenberg P, et al. Effectiveness of acupuncture as adjunctive therapy in osteoarthritis of the knee: a randomized, controlled trial. *Annals of Internal Medicine*. 2004;141(12):901-910.
- Eisenberg DM, Cohen MH, Hrbek A, et al. Credentialing complementary and alternative medical providers. *Annals of Internal Medicine*. 2002;137(12):965-973.
- Ernst E. Acupuncture—a critical analysis. *Journal of Internal Medicine*. 2006;259(2):125-137.
- Kaptchuk, TJ. Acupuncture: theory, efficacy, and practice. *Annals of Internal Medicine*. 2002;136(5):374-383.
- Lao L. Safety issues in acupuncture. *Journal of Alternative and Complementary Medicine*. 1996;2(1):27-31.
- MacPherson H, Thomas K. Short-term reactions to acupuncture—a cross-sectional survey of patient reports. *Acupuncture in Medicine*. 2005;23(3):112-120.
- National Cancer Institute. *Acupuncture (PDQ)*. National Cancer Institute Web site. Accessed at <http://www.cancer.gov/cancertopics/pdq/cam/acupuncture> on August 16, 2007.
- National Institutes of Health Consensus Panel. *Acupuncture: National Institutes of Health Consensus Development Conference Statement*. National Institutes of Health Web site. Accessed at <http://consensus.nih.gov/1997/1997acupuncture107html.htm> on June 22, 2007.
- Reston J. Now, about my operation in Peking; Now, let me tell you about my appendectomy in Peking... *New York Times*. July 26, 1971:1.
- U.S. Food and Drug Administration. Acupuncture needles no longer investigational. *FDA Consumer*. 1996;30(5). Also available at http://www.fda.gov/fdac/departs/596_upd.html.

For More Information

NCCAM Clearinghouse

The NCCAM Clearinghouse provides information on CAM and NCCAM, including publications and searches of Federal databases of scientific and medical literature. The Clearinghouse does not provide medical advice, treatment recommendations, or referrals to practitioners.

Toll-free in the U.S.: 1-888-644-6226

TTY (for deaf and hard-of-hearing callers): 1-866-464-3615

Web site: nccam.nih.gov

E-mail: info@nccam.nih.gov

PubMed®

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Web site: www.ncbi.nlm.nih.gov/sites/entrez

CAM on PubMed: nccam.nih.gov/camonpubmed/

ClinicalTrials.gov

ClinicalTrials.gov is a database of information on federally and privately supported clinical trials (research studies in people) for a wide range of diseases and conditions. It is sponsored by the National Institutes of Health and the U.S. Food and Drug Administration.

Web site: www.clinicaltrials.gov

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