

Acupuncture

Acupuncture has truly withstood the test of time since it was first practiced in China for over two thousand years. Hundreds of modern scientific studies have shown that acupuncture works through the release of neurotransmitters in the brain, which can result in relief of pain and other conditions. The National Institutes of Health (NIH) recently convened a panel of experts who concluded that acupuncture has a scientific basis, and that it has demonstrated efficacy in some conditions. In others, additional studies are required. At our Center acupuncture is performed by the Director of the Center, Alexander Mauskop, M.D., who is a licensed acupuncturist. Unlike what many people imagine, acupuncture is usually a very pleasant experience. Many people fall asleep during the procedure. It is nearly painless because of a special insertion technique using very thin disposable needles. Each session lasts 20-30 minutes and a usual course of treatment consists of 10 weekly sessions.

ACUPUNCTURE

By: Alexander Mauskop, M.D.,

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The first description of the use of acupuncture for the treatment of headaches is credited to a Chinese surgeon Hua Tuo (A.D. 110-207) in the Han dynasty. The fact that acupuncture has been used for thousands of years did not bring it a quick recognition in the western world. Only in the past five-to-ten years has acupuncture been given a solid scientific basis. Many physicians and patients, however, still consider acupuncture to a faith healing method. This in part is explained by the fact that the theory of traditional Chinese acupuncture is part of the general theory of traditional Chinese medicine, which includes the concepts of ying and yang, five elements, energy flows, pulse diagnosis, etc. It has become clear that even if these concepts are not taken into account, acupuncture is still very effective for the treatment of painful conditions, including headaches and facial pain.

PRACTICE OF ACUPUNCTURE

What is preserved in the modern version of acupuncture practice are specific, commonly-used acupuncture points where special acupuncture needles are inserted and left in place for about 20-30 minutes. In traditional acupuncture the needles are stimulated by twirling them. Some practioners pass a weak alternating current th rough the needles. Reports have appeared that describe the use of laser beam stimulation of the acupuncture points without the use of needles. Most of the studies that have been done in the west, however, used needles rather than laser beams. and most practitioners continue to use

needles. The latter are usually made of stainless steel and are disposable. They are inserted into different points over the scalp, face, neck and hands depending on the type and location of the headache or facial pain. A needle guide can be used to make the insertion painless. The treatment course typically consists of weekly or twice-a-week sessions which may continue for weeks and with lesser frequency for months. Typically, after 5-6 sessions it is determined whether or not any improvement has occurred. Even if only a small reduction in frequency, severity or duration of headaches has occurred, it may be worthwhile to continue the treatment. On the other hand, if no improvement has occurred, the chances that acupuncture will work are small. It is an established fact that 15% of humans and animals alike do not respond to the pain relieving effect of acupuncture at all.

There are several advantages to having a physician to perform acupuncture. During the course of treatment, a physician can detect an organic cause of the headache that might not have been apparent on the initial examination and that may require specific therapy. Acupuncture alone may not be sufficient, but a combination of acupuncture with medications and/or biofeedback may stop the headaches. If acupuncture is not performed by a physician, the patient should have at least one neurological examination. Any sudden change in the pattern of headaches (unless it's an improvement) should be evaluated by a physician. An additional benefit to having a physician perform acupuncture is that many insurance companies are more likely to reimburse the patient if the treatment is done by a physician.

BASIC MECHANISMS

It has been established in clinical and experimental studies on humans that acupuncture is better than placebo in the treatment of chronic pain. Animal experiments also confirm the objective nature of this response. A large body of research has identified some but not all mechanisms of action of acupuncture. Acupuncture activates small nerve fibers in the muscle. This activation is transmitted through the spinal cord to the midbrain and pituitary-hypothalamus. The pain relief mechanisms begin in the spinal cord where chemical messengers, enkephalin and dynorphin (neurotransmitters), block incoming painful messages. The center in the midbrain uses enkephalin to inhibit pain transmission using serotonin and norepinephrine. The hypothalamus-pituitary is the third center, which releases betaendorphine into the blood and cerebrospinal fluid to cause analgesia at a distance. This mechanism seems to be operating when a low frequency stimulation is used.

CLINICAL STUDIES

The most objective way to prove effectiveness of any treatment is by using a double-blind study design. This means that neither the patient nor the person who performs and evaluates the treatment knows whether a real or sham

treatment is being performed. Only by comparing two large groups of patients treated with real or sham therapy, can a definite conclusion about the effectiveness of the treatment be made. It is virtually impossible to perform a double-blind study to evaluate acupuncture. If in the control group the needles are inserted in the wrong locations, this will still produce an effect better than the placebo would. If no needles are inserted, the patient will obviously know it. Many studies have been performed without controls or with controls that received no treatment. These, so-called anecdotal reports, show improvement rates of 55%-85%, which is better than the placebo response that usually gives about a 33% improvement rate. In other, more scientific, controlled studies, control group of patients received acupuncture in wrong locations or had needles taped to the skin without inserting them. These studies also show a similar success rate of 55%-85%, which exceeds the success rate in the control groups. Although these studies offer no absolute proof of the effectiveness of acupuncture, circumstantial evidence is very strong and it is being supported by the basic research into the mechanisms of acupuncture.

In conclusion, acupuncture is a valid and scientifically based method of treatment of migraine, tension and other headaches as well as facial pain. It offers several advantages, such as almost no side effects or complications, low cost and high success rate. I feel that it should be tried early rather than as a last resort treatment when everything else has failed.