

The National

Pinning down a cure

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Acupuncture has been an important part of traditional medicine in the Far East for at least 2,500 years, with some putting the earliest evidence for its use as far back as the stone age. Over the past few decades, its increasing popularity outside China has seen it used in the West to treat everything from sports injuries to fertility problems.

But with this increasing popularity has come increasing scrutiny of the claims made for the effectiveness of acupuncture. Now, a major new study from Denmark has added to evidence that the treatment, traditionally used to control pain and maintain good health, does not work in the way practitioners and advocates have always believed.



Both traditional and placebo acupuncture are said to be more effective in relieving pain than no treatment at all. iStockphoto.com

Scientists have long been curious about how effective acupuncture really is and how it works. This curiosity has increased as a number of studies have suggested that it can help people suffering from certain conditions, particularly chronic ones that can be difficult to treat with conventional medicine, including migraines as well as neck and back pain. Acupuncture has also been shown to be an effective treatment for those suffering the ill effects of chemotherapy by reducing their nausea and boosting their immune system. Add to this tradition the colourful legends about Chinese operations conducted using acupuncture instead of anaesthetic, such as open heart surgery performed on patients who are supposedly fully conscious throughout the procedure.

Danish researchers at the Nordic Cochrane Center reviewed results from over 3,000 patients and data from 13 studies on the use of acupuncture as a method of relieving pain. They concluded that there wasn't enough of a difference between those who had experienced acupuncture and those who had had placebo acupuncture – where needles are inserted into the skin but not at the traditional acupuncture points – to clinically state that traditional acupuncture really works.

The patients surveyed suffered from a variety of painful conditions that acupuncture is often used to treat, including migraines, lower back pain, post-operative pain and knee osteoarthritis. In the review, the researchers compared the results of three types of treatment: acupuncture, placebo acupuncture and no treatment. They concluded that both types of acupuncture reduced the pain that the patient was suffering compared to no treatment, but that there was only a small amount of difference between the placebo acupuncture and the real acupuncture, and not enough to prove that real acupuncture is more effective.

Does this mean that acupuncture doesn't work? Not exactly, says Mike Cummings, the medical director of the British Medical Acupuncture Society (BMAS). BMAS is a charity that was set up to encourage the use of acupuncture within western medicine, and is based at the Royal London Homeopathic Hospital. While traditional Chinese medicine takes a holistic approach, using diet, massage and herbs to treat illnesses as well as theories about chi, or energy flow, his work primarily looks at how acupuncture on its own can work with conventional medicine and be used as a complementary therapy to modern medicine.

Cummings has strong feelings about the Danish research. He says that because the review left out studies that directly compared traditional acupuncture and no treatment, the conclusion is incomplete. But, while he says that it is difficult to draw clinical conclusions from the Danish review, he adds that it does allow for discussion of "the big issue": how effective placebo acupuncture is. "Now we're starting to see results. It can work," he says.

"Two other large reviews have recently been published about the efficacy of acupuncture in treating migraines and in treating tension-type headaches, and both broadly showed that there was no difference between placebo and real acupuncture, but that both were at least as good as conventional care – if not better," he continues.

"In the case of migraines, introducing needles into the body on the traditional acupuncture points as well as away from them was shown to be superior to conventional care. And in Germany, there has been a big study into back pain, looking at the effect of acupuncture, placebo acupuncture and standard care. In that case, placebo acupuncture was shown to be clinically more effective than the standard care given."

This new understanding of how acupuncture seems to work in a physiological way contradicts the traditional explanation of Chinese acupuncture. In this understanding of the body, sickness happens when there is a displacement or blockage of energy. This energy flows around 12 meridians in the body. Simply put, acupuncture treatment for various parts of the body involves inserting needles into precise points to stimulate the energy flow again. In addition to this as a therapy, Chinese medicine uses herbs, massage and diet to keep the body in holistic balance. But if placebo acupuncture works just as well, it suggests that those acupuncture points aren't accurate and that therapists don't need pinpoint accuracy when they insert needles.

"Acupuncture points don't exist in the physical world," explained Cummings. "That is to say, we haven't been able to find them anatomically. The Chinese describe them pragmatically, saying that a certain combination of points works, but we have tested them in research terms and it's hard to pin down. It's all about nerve stimulation really, and the exact spot seems to make no difference."

If you don't need to place the needles precisely on these pathways, it seems that something else must be going on. As the needles enter the skin, they stimulate the nerves and muscles and have been shown to aid the activity of the body's painkilling chemicals, endorphin and serotonin, in both the spinal cord and the brain. It is thought that this affects how the body receives pain signals, and that this then explains how acupuncture provides pain relief. It's also thought that it can stimulate hormone production and affect the chemicals regulating blood pressure and flow too, and patients also often notice an improved sense of

well-being after treatment, which may be caused by to the stimulation of endorphins as well. But the specifics of what is actually happening in the body are far from clear – hence the vast number of ongoing research projects seeking to establish clinical evidence for the therapeutic effects of acupuncture.

Research into placebo acupuncture is a bit muddy, as definitions of what is and isn't hitting the mark differ. Some studies count inserting needles two centimetres away from the traditional acupuncture point in the same muscle, while others insert needles into parts of the body where there aren't any meridians, for example on areas on the back, calling that a placebo acupuncture effect. Others might not insert needles as deeply or might not stimulate the needles, again producing a different effect. And coupled with any scientific effect of the treatment, the psychological impact of having a therapist insert needles into your skin and the ritual of the lengthy consultation is also thought to be an important part of the effect.

"Sham [or placebo] acupuncture is sophisticated," says Cummings. "It's all about touch, expectation and ritual. We do see a trend towards real acupuncture working, but it's not hugely different at this level. Critics say that it's not enough to be clinically relevant. I don't think it matters: what the research is showing us is that sticking needles into people versus not sticking needles into people works."

Acupuncture is a potent therapy and it is important to use a trained medical acupuncturist. While side effects are unusual, patients can suffer bruising and nausea. Pierced lungs, Hepatitis B or other blood-borne infections are very rare risks if the practitioner doesn't use the standard disposable needles (although the vast majority do). Should you want to try it for yourself, Abu Dhabi's National Hospital has a specialised holistic health centre offering acupuncture for pain management, with treatments costing Dh125 per session, with typically five to seven sessions recommended for a full treatment programme.

Abu Dhabi National Hospital Holistic Health Centre: New Al Najda Street, Abu Dhabi (02 6711 000, www.nmcgroup.net).

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