
Should interdisciplinary treatment of chronic pain conditions include acupuncture?

OPINIONS

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Endogenous physiological mechanisms can explain the effects of acupuncture, but the treatment has not yet been integrated into Norway's public health service.

About 30 % of the Norwegian population report that they are living with chronic pain [\(1\)](#). Musculoskeletal diseases are the most common cause and are the main diagnosis in 38 % of doctor-certified sick leave [\(2\)](#) and 28 % of

disability benefit cases [\(3\)](#). The incidence of chronic pain has increased slightly in recent years [\(1\)](#). Therefore, we believe it is high time to reassess preventive interventions and pain therapy.

In 2018, the Norwegian Medicines Agency received 5 623 reports of adverse effects [\(4\)](#), and 31 % of these were classified as severe [\(4\)](#). The Minister of Health and Care Services, Bent Høie, has called on health trusts to provide drug-free treatment options. Despite this, analgesics are usually the first choice of treatment. Other methods with comparable effects, such as acupuncture and cognitive therapy, are used less frequently even though they have no, mild or fewer adverse effects [\(5\)](#).

Physiological mechanisms of acupuncture

Complex chronic pain conditions require treatment that can affect both the peripheral and the central nervous systems [\(6–8\)](#).

Acupuncture points are located in areas with high concentrations of sensory nerve endings found in the fascia [\(6\)](#). The effect of acupuncture is blocked when local anaesthesia is injected into these points and when peripheral nerves are blocked [\(9\)](#). MR imaging of the brain has shown specific changes in response to acupuncture [\(10\)](#).

Acupuncture – merely a placebo?

Acupuncture is often characterised as 'merely a placebo'. It is important to note that a significant placebo effect does not rule out the efficacy of the treatment [\(8\)](#).

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Sham acupuncture involves a surface penetration with needles in areas with low concentrations of nerve endings. The method affects touch receptors, provoking changes in the limbic system, and is far from perfect as a control intervention. It is possible that this effect has been misunderstood to be a placebo or that the placebo associated with acupuncture is a 'true' placebo, in addition to limbic modulation. Thus, the comparison of active treatment and sham acupuncture may be an observation of two different key mechanisms.

Recommended internationally

According to the Cochrane Collaboration, acupuncture is a promising treatment for back, neck and pelvic pain (11) as well as for headache (12), and WHO recommends acupuncture for 28 different conditions (13). The UK National Institute for Health and Care Excellence (NICE) (14) recently published new draft guidelines for the treatment of chronic primary pain. The institute recommends that treatment should consist of exercise, psychological therapy and acupuncture rather than analgesics. According to NICE, there is little or no evidence that drug treatment (including non-steroidal anti-inflammatory drugs, gabapentin and opioids) reduces pain or improves patients' quality of life.

High time for a change

Conventional medical treatment is often the first-line pain therapy, and alternative treatment methods are only considered when drugs have no effect, unacceptable adverse effects occur or the patient requests a different type of therapy. Acupuncture is an inexpensive, evidence-based treatment with a low risk profile, and it is a good alternative or supplement to drugs. In our view, too little consideration has been given to combining conventional medicine and evidence-based alternative treatment, such as acupuncture.

There is no doubt that the field of acupuncture should be updated. In order to integrate acupuncture into the Norwegian public health service, the field must be adapted to anatomy, physiology and pathology, as well as to Western evidence-based medicine. Our current strategies for treating chronic pain conditions have not managed to stop the increase in the number of Norwegians with chronic pain. We need to start thinking outside the box.

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