Use of acupuncture for stroke in China

Shihong Zhang, Ning Li, Ming Liu

The article Scalp acupuncture effects on stroke studied with magnetic resonance imaging: different actions in the two stroke model rats investigated the possible mechanisms of acupuncture in acute stroke, and found that scalp acupuncture may relieve vasogenic oedema after stroke. The study was conducted in the laboratory, but its hypothesis was based on clinical reports from China of ‘significant’ instantaneous effects of acupuncture in acute stroke. Such large effects may be considered to be unimaginable in Western countries since the evidence from recently published randomised controlled trials (RCTs) is not at all conclusive. So, if these effects really exist, they should be more widely known. Therefore, we have been invited to comment on how acupuncture is used in China, including the current status of acupuncture for stroke, and especially electroacupuncture (EA) application for stroke.

It is true that acupuncture, as one main part of traditional Chinese medicine, has been used for treating stroke for over 1000 years. Before Western medicine was introduced into China, acupuncture and Chinese herbal medicine were the main interventions used for acute stroke. A variety of acupuncture theories involving different acupuncture point selection and stimulation methods have been developed. The cultural background has a significant influence on current treatment of acute stroke in China, even though evidence based medicine has been increasing advocated in recent years. In a recent survey, 66% of Chinese doctors used acupuncture for stroke routinely and 63% believed acupuncture to be effective. In addition, each year thousands of students graduate from traditional Chinese medicine academic schools and are licensed to practice acupuncture, which provides adequate staff resources.

There have been no reports on the exact proportion of patients with stroke who receive acupuncture treatment. However, it is thought that acupuncture is used as the main complementary therapy in the county-level hospitals where standard rehabilitation is not available, and also in a high proportion of patients in the higher level hospitals (eg, university hospitals) where rehabilitation is commonly used. During the last year, about 500 patients with acute stroke were admitted in our hospital, and half of them received acupuncture treatment. The common use of acupuncture for stroke in China can also be reflected by a variety of published Chinese literature. A search of the most complete Chinese literature database (VIP, an electronic periodicals database established by Wei Pu company) showed that there were 596 articles related to acupuncture for stroke published in 2008, most of them (68%) were observational or comparative studies of the efficacy of acupuncture used alone or in combination with other treatment.

Although acupuncture is used to relieve post-stroke sequelae, such as limb muscle spasm and shoulder-hand syndrome, it is more commonly used in the acute stage of stroke. The neurological impairments that are treated with acupuncture include not only limb weakness but also other symptoms of acute stroke including aphasia, dysphagia and incontinence. In the above database search, more than 200 articles addressed the effects of acupuncture on acute stroke. It is generally thought that more obvious effects could be obtained if acupuncture were used earlier after the onset of stroke. For this reason, a large number of RCTs of acupuncture on stroke approved and sponsored by the State Administration of Traditional Chinese Medicine in the last 10 years have focused on acute stroke rather than stroke sequelae.

EA was introduced into clinical practice about 50 years ago. It differs from classic acupuncture in the stimulation method but not in selection of acupuncture points. In most cases electrostimulation is given after the needles have been inserted and stimulated by hand until de qi or muscle contraction occurs. The procedure not only uses the same principles as classic acupuncture but also saves manual labour. In addition, the intensity, frequency and duration of electrostimulation can be adjusted individually for each patient or standardised for all patients in clinical trials. Because of these advantages over classical acupuncture, EA became more and more popular after it was introduced. In our department, almost every patient receiving acupuncture has electrostimulation. Of the 396 articles on stroke published in 2008, 68 stated that EA was used and 40 included patients in the acute stage. Actually, only a few conditions, such as heart disease with pacemaker, and pregnancy, are contraindication of EA.

There are a few published articles comparing classic acupuncture with EA, and few of these were designed as high quality RCTs. A significant instant improvement of neurological impairment has been reported in a few case reports of both classic acupuncture and EA. When I discussed this topic with an acupuncture therapist in our department, he stated that he knew of no more than five patients having significant instant improvement with acupuncture in 5 years of practice. Thus, instant effects of acupuncture might exist but are not common. It is more likely that acupuncture improves neurological impairment in a gradual way by increasing the blood supply of ischaemic tissue and enhancing cerebral re-plasticity through nervous reflexes. In another words, further trials should give more attention to the long-term effects of acupuncture.

**REFERENCE**

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