Acupuncture and menopausal hot flushes – more research is needed

Climacteric symptoms including vasomotor symptoms with hot flushes and sweating, are very common in the Western world – up to 75% of women report such symptoms – and are often treated with a combination of oestrogens and progestogens, ie hormone therapy (HT). Some women with these kinds of symptoms do not want HT, others have contraindications or side effects, and therefore the development of alternative therapies is important. Moreover, during the last few years the use of HT has decreased dramatically, because prospective, randomized, placebo controlled studies have been unable to confirm the preventive effects on cardiovascular disease found in observational studies. Furthermore, long term HT has been associated with increased risk of breast cancer. The HABITS study (Hormones After Breast Cancer – Is It Safe) compared HT and non-hormonal alternatives as treatment of climacteric symptoms in women with cancer in situ or stage I breast cancer. This study was stopped because women in the HT arm had increased risk of recurrence compared to women who had non-hormonal therapy. This has added to the need for alternative therapies. Pharmacological alternatives have been suggested but reduce vasomotor symptoms to a limited extent compared to HT. Prospective randomised studies on SSRI and SNRI preparations have been performed, and are ongoing, but even these alternatives have limited success in diminishing the symptoms. Therefore there is a need for development of other ways to help women who do not want to use, or are prohibited from using, HT as treatment of vasomotor symptoms.

In her letter, Margareta Sandberg discusses studies of acupuncture treatment of vasomotor hot flushes, it was probably a central response mediated via changes in beta-endorphin, 5-HT and CGRP, and both 'doses' were effective, to a varying extent, in the papers we included. Lund and Lundeberg have pointed out in the last issue of Acupuncture in Medicine that neurophysiological mechanisms, only recently described, explain how superficial treatment could be effective. Perhaps I can be forgiven for using the word 'superficial treatment' when Wyon et al actually used the term 'superficial needle insertion' in their paper, and the term 'extremely superficial needling' was used by Sandberg et al in 2002. Sandberg is to be commended for the clarity with which she described her needling and control techniques.

If acupuncture is an all or nothing phenomenon, perhaps we should be looking for the smallest possible 'dose' of acupuncture to give a clinically useful effect. From a pragmatic clinical point of view, if patients with challenging symptoms after a life-changing diagnosis can gain long term relief from a simple treatment, perhaps we should continue our quest to study acupuncture in this area. Further formal research is currently in the development stage.

The research colleagues involved in the trials of acupuncture for hot flushes mentioned by Sandberg were invited to contribute to this discussion - Ed

Reference List

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symptoms. She emphasises that our studies have been unable to confirm that electrostimulation acupuncture was superior to a control method using superficial acupuncture. We agree that it is of utmost importance to describe the method used in order to enable comparisons of different studies. On the other hand, to conclude that electrostimulation acupuncture has no effect on vasomotor symptoms is incorrect according to our point of view. What can be concluded according to us is that this control method is not a placebo method totally devoid of tactile effects. Unfortunately even this method causes tactile and neuronal stimuli and is not without some physiological influence.

Today there is a placebo needle available that does not penetrate the skin, but that method was not published when we designed and initiated our studies. Furthermore, even that method probably causes some tactile stimuli and there is still no method causing absolutely no stimuli. The effect of electroacupuncture and superficial acupuncture may therefore only be compared with other kinds of placebo treatment of the specific condition – in this case vasomotor symptoms. Freedman and Woodward found a 10% reduction of the number of hot flushes using biofeedback, which was used as a control method versus behavioural therapy of vasomotor symptoms. Studies of oral and transdermal HT and placebo often show strong effects on vasomotor symptoms down to a 50% reduction of the number of flushes. This is not unexpected bearing in mind that placebo has been found to affect central endorphins which are probably also involved in thermoregulation and thereby also in the mechanisms of hot flushes. Probably also the treatment environment in a calm and friendly situation affects the outcomes of therapy. This may change sympathetic tone, which is also probably involved in thermoregulation. It has been shown that the central noradrenaline metabolite 3-metoxy-4-hydroxyphenyl-glycol is increased during flushes, suggesting that the noradrenergic system is also involved. We have found, however, that effects of acupuncture persist more than six months after the end of therapy, without the women seeing their therapist at all, and only seeing their doctor once. This does not support the contention that the persistent effects are merely non-specific or induced by the treatment situation.

For the following reasons, we would like to suggest that electroacupuncture induces specific effects on vasomotor symptoms in postmenopausal women:

(i) The effects of treatment on the number of flushes per day persisted at least six months after the end of treatment without the women seeing their therapist at all

(ii) The reduction in number of flushes per day was more extensive than has ever been shown with placebo treatment. In the c80% of women who responded to therapy (ie had at least a 50% reduction of flushes) the decrease in number of flushes was about 75% (range 50-100%), which is a stronger effect than reported with eg SNRI and SSRI therapy

(iii) In parallel with decreasing numbers of hot flushes we found decreasing urinary excretion of calcitonin gene-related peptide – a potent vasodilator and sweat gland stimulator. In other studies we have shown that this neuropeptide increases during the flush, and may be a mediator of the flushing mechanism from the thermoregulatory centre to the periphery.

We consider the effects of acupuncture interesting enough to merit further investigations, in order to confirm whether or not it can be used as an alternative to HT. The mechanisms behind the flushes and the possible ways by which acupuncture may affect the flushes should be subjected to further research. We believe that placebo effects and the treatment situation can both affect the treatment, but we believe that there are also specific effects associated with acupuncture therapy. It is a challenge to find a real placebo method, and the superficial acupuncture used by us does not solve the problem, but this should not prevent further efforts to develop and evaluate treatment alternatives to HT for women in great need of alternative methods for their climacteric symptoms.

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Mirror image contralateral pain reproduction in a case of acupuncture treatment for medial epicondylitis

Editor – The patient, a very fit 50 year old lady, presented with classical symptoms and signs of left medial epicondylitis (‘golfer’s elbow’). Over the preceding two months, she had been given three injections of Depo-Medrone (30mg) at three-weekly intervals. These were injected onto the most tender periosteal area of the medial epicondyle with relief lasting only a few days afterwards. Strong analgesic drugs and NSAIDs were also prescribed with no benefit. The painVAS score was 60/100.

I inserted three acupuncture needles (0.25x30mm) into the most tender area of the periosteal surface of the left medial epicondyle, into classical acupuncture point HT3, and distally into the muscle bulk of pronator teres. The needles were left in situ for 20 minutes, with stimulation every five minutes by manual rotation to achieve a constant aching sensation. I have more than two years experience of acupuncture practice and hold the COBC.

The patient returned one week later. The pain VAS score had reduced to 30. She stated that twelve hours following the initial treatment she experienced severe pain in the right elbow in an exact mirror image distribution of the painfully stimulated area at the left elbow. This pain persisted for one day and then gradually eased.

Following a second similar treatment, the pain gradually faded, without any recurrence of the mirror image contralateral pain, and at her third visit 10 days later she reported that her symptoms were completely resolved.

I was most puzzled by the pattern of contralateral pain, and I have been unable to find any similar reports in the literature. The patient herself was most surprised. She has had no recurrence of her symptoms three months later.

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