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Editor – I wish to comment on two articles in the December issue of Acupuncture in Medicine which are both of interest to me. One of the articles is by Filshie et al on acupuncture for vasomotor symptoms, and the other is on a review of one of my own papers.

I am commenting on these articles to stress the absolute necessity of a complete, thorough and accurate description of the methods used in acupuncture studies in order to draw and present proper conclusions from the results and to stress the necessity of properly referring to the study reports.


Filshie et al refer to studies on acupuncture for climacteric symptoms by Wyon et al., and Sandberg et al., the latter with myself as the primary author.

In the article by Filshie et al readers are given the impression that these papers represent three separate studies, which is not the case. The research group consisting of Wyon, Hammar et al (and myself at that time) has only conducted two RCTs on electroacupuncture (EA) for climacteric symptoms in healthy postmenopausal women. The first study was published in 1995, but was first commented on in the Swedish journal Läkartidningen in 1994.

Results from the second study were first published in Complementary Therapies in Medicine with myself as the primary author, and with Wijma, Wyon, Nedstrand and Hammar as co-authors. In 2004 another paper was published based on the same study, but with Wyon as primary author. I performed all acupuncture treatments in these two studies, with the exception of the number of treatments given identically: in the first study 11 and in the second 14 treatments.

When referring to these studies, Filshie et al write that two forms of acupuncture were compared, EA (including deqi) and superficial acupuncture. This is not true – or may be true, depending on definitions. However, in the paper by Sandberg et al, the term ‘superficial acupuncture’ is not mentioned. In the papers with Wyon as primary author this term is used but no detailed information is given to explain exactly what is meant by it.

Filshie et al leave out crucial details of the needling techniques when referring to these studies, which may have important consequences. Superficial acupuncture is an imprecise and vague description. What does it really mean? There is no consensus or definition of this conception. When no further details are given, readers are likely to interpret superficial acupuncture as a procedure where needles are inserted well into subcutaneous layers with the intention of being an active form of acupuncture. However, this is not always the case.

In the papers by Wyon et al., methods are incorrectly, incompletely or imprecisely described with the result that the readers will mistakenly interpret superficial acupuncture as a form of true acupuncture into subcutaneous layers. The aim of the studies was to evaluate the effects of EA, and in both studies EA was compared with a placebo acupuncture procedure. In the paper from 2002, the needling techniques are thoroughly described in the Methods section: ‘In the SNI (=superficial needle insertion) group, the 12 needles (Hwato, 0.25 mm diam, 15 mm long) were attached to the skin extremely superficially, and 1-15cm away from the acupuncture points used in the EA group. They were left hanging loosely down the skin without any further stimulation. Only the small dimension needles were used, all of which were out of sight of the woman.’

Further comments are given in the Discussion section: ‘The EA and SNI groups were managed identically, the only difference being strength of afferent sensory stimulation applied. The SNI
The technique used in the present study is not identical with 'superficial acupuncture' (SF), where needles are inserted into subcutaneous tissue to a depth of 3-5mm. 

And further: "Minimal acupuncture", with needles inserted 1-2mm and stimulated extremely lightly, is described as a 'true' / 'acceptable' / 'near-placebo' control, and resembles the SNI technique used in the present study. However, no stimulation at all was applied to the needles in the present study. They were out of sight of the women, and some of the extremely superficially inserted needles fell off immediately, or during the treatment session. Thus, special efforts were made to minimise the physiological response of the needles while maintaining its psychological impact in order to establish a near-placebo control.

The placebo acupuncture procedure is in this paper labelled 'near-placebo', and information is given in the Discussion section that Wyon et al used identical needling techniques in the first study, published in 1995: Moreover, in the study by Wyon et al (1995), with identically treated EA and control groups, both groups improved on number of hot flushes and 24h urine excretion of calcitonin gene related peptide, without significant between-groups differences. Thus, the results of the two studies are consistent, and indicate that both psychological and physiological changes may occur.

The prefix 'near' is to justify the sensory stimulation, although extremely small, which may result from one or two of the 12 needles. However, as Wyon et al omit crucial details of what is meant by 'superficial acupuncture' and 'near-placebo acupuncture', respectively, readers are not to be blamed for interpreting the results as positive outcomes of acupuncture. Unfortunately, Filshie et al rather reinforce these misinterpretations by not pointing to the important and essential information on methods given in the paper from 2002.

The use of the near-placebo acupuncture method was possible only because the women were not able to see the needles, which were loosely hanging down the skin on the back and extremities, some of which immediately dropping out, and which, with one or two exceptions, produced no sensation. This procedure is far from what we mean by acupuncture. Wyon et al reduce the near-placebo acupuncture method and EA to one single concept: acupuncture.

A painkiller and an incision by a surgeon would never seriously be labelled with a common term such as medical intervention. Thus, when using the label superficial acupuncture, especially in the context of serious scientific research, it has to be followed by a precise description in order to avoid misunderstandings and misinterpretation.

In fact, both EA and the near-placebo acupuncture procedures resulted in significant improvements, lasting for several months. The conclusion from these results is simply that the near-placebo acupuncture procedure was equal to EA, ie in these two studies it was not the needling itself that was crucial for the results. The very interesting question of what was the crucial component or components is simply left in for the sake of a wish to show effects of acupuncture. Thus, according to these RCTs there is no scientific justification for recommending EA or manual acupuncture for vasomotor symptoms in healthy postmenopausal women.


Now to the second point on different needling techniques: one of our studies assessing effects on blood flow of different forms of needling, or, expressed differently, by different 'doses' of acupuncture, was reviewed in the same issue of this journal. The reviewer states that this study 'has important implications for placebo controlled clinical trials – we cannot assume that superficial off-point needling will constitute a 'minimal' acupuncture treatment for all patient groups'. This is quite true. I would just like to make some clarifying comments.

In this study, deep needling into the trapezius muscle, and superficial needling not penetrating the muscle fascia but with the needles well inserted into subcutaneous tissue and producing more or less pain sensation. It is important to stress that this procedure is not equal to the needling procedure described above, labelled near-placebo acupuncture, that is needles inserted just into the most superficial skin layer not producing pain sensation.
When one 0.30x30mm needle was inserted into subcutaneous tissue over the trapezius muscle, healthy subjects did not respond with increased blood flow. However, fibromyalgia patients did.1 When three small needles (0.20x15mm) were inserted into subcutaneous tissue (within an area of about 10mm diameter) over the trapezius muscle, increased blood flow was found in both healthy subjects and fibromyalgia patients alike, with fibromyalgia patients reporting significantly more pain sensation. Thus, it seems that site of needling, gauge and number of needles, level of pain elicited, and patient group may all be of importance in the blood flow response to subcutaneous needling. Long after the climacteric studies were finished I investigated in a few subjects blood flow responses to the near-placebo acupuncture procedure described above using the same points as in these studies (when possible). There was no increase in skin or muscle blood flow, thus strengthening the use of this procedure as a valid placebo for EA.

In summary, a complete, proper and concise description of the methods used in scientific acupuncture studies is a prerequisite enabling correct interpretation of the results as well as enabling replication of the study by others. As long as explicit definitions of different modes of acupuncture are missing, the needling procedures used have to be described in detail.

Author’s response

The dose of acupuncture

Editor – I should like to thank Margareta Sandberg for her letter about our recent paper, in which she raises some very interesting questions. On her first point, I would like to thank her for clarifying the fact that the four distinct papers referred to separate aspects of only two studies. Her second point goes right to the heart of the debate about what constitutes an adequate ‘dose’ of acupuncture for both clinical practice and acupuncture research. Does the ‘dose’ depend on the depth of insertion alone or does it relate to the number of needles, the location, the intensity of stimulation etc? It most likely depends on all of these factors. What constitutes an adequate control treatment in acupuncture studies? The IARF document, which represents a consensus of researchers in acupuncture, attempted to address this challenging question. The role of expectation of a therapeutic response is extremely complex and expectation may add to any specific effect on needling.

Basic studies on acupuncture ‘dose’ are slowly emerging, for example Paul Marcus’s paper on manual acupuncture, and Panos Barlas’s latest paper on intensity of electroacupuncture stimulation. In the UK most medical acupuncturists are taught that all needles will have some neurophysiological effect, in the absence of sensory loss or local anaesthesia, and that some points will have greater effects than others, based on such factors as nerve density, and the proximity of needling to a trigger point, for example. Is it a central effect or a peripheral segmental effect that is required? We suggested in our paper that for...
Acupuncture procedures must be accurately described

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