A matter of mind or matter

Kim A. Jobst MA MRCP, Oxford, England

The persisting matter of the Oxford acupuncture study

In 1986 a double-blind placebo controlled study carried out on the Osler Chest Unit at the Churchill Hospital in Oxford demonstrated that the response of patients with chronic disabling breathlessness who received Traditional Chinese Acupuncture (TCA) prescribed according to their individual needs, was significantly different from those receiving placebo acupuncture in measures of exercise tolerance, activities of daily living, breathlessness, walking distance and general well-being after three weeks' treatment 1. That there were such clear changes in both subjective scores (general well-being, general level of breathlessness, the oxygen cost score and modified Borg score - a measure of breathlessness after exercise) and objective scores (the distance walked in 6 minutes), reflecting changes in functional capacity and perceived breathlessness, was surprising after only 3 weeks. That there were no highly significant differences in other measures of lung function, haematological and immunological indices was not surprising, although there were interesting changes in blood gas evaluations in relation to indices of lung function which failed to reach statistical significance 2.

Our hypothesis was that since exogenous prescribed opiates and benzodiazepines can change perception and exercise tolerance, and have been shown to have endogenous analogues which may be released by acupuncture stimulation, then acupuncture in chronic disabling breathlessness might ameliorate breathlessness by similar endogenous pharmacological mechanisms already proven to exist. The results of the study lend circumstantial evidence for our hypothesis, however they do not constitute proof. We have no information on whether endogenous opiates or benzodiazepines were actually involved. Indeed, we know very little about what mechanisms may have been invoked. Does this matter and has this study had any impact on the perception or utilization of complementary medical techniques by the public, the medical profession and professions allied to medicine? Some have answered both yes and no to one or both aspects at different times and in different situations. What was going on in the Oxford Acupuncture Study? How are the results to be evaluated beyond the statistical evaluation already performed? What should be our proper response?

In thinking about these and other questions whilst trying to understand and evaluate our results and ways to investigate them further, I have frequently returned to a quote from Gordon Holmes's foundation address to the Montreal Neurological Institute in 1934 in which he says the following.

Can we then express in a few words what is required of the clinician who seeks knowledge and truth by the method of science? In the first place he must be trained to observe accurately, to see not merely what he is looking for but to examine all the phenomena connected with the question and to neglect or discard no fact no matter how apparently trivial. In the second place he must learn to describe observed facts accurately and completely, but simply and concisely... In the third place the student must equip himself with that intellectual honesty and independence which refuse to submit to authority or to be controlled by preconceptions and which are ready, when ascertained facts require it, to reject a theory or hypothesis which has been perhaps hallowed by tradition and become an article of faith. Finally he must learn to doubt conclusions too hastily or too easily reached; it has been truly said that 'suspended judgement is the greatest triumph of intellectual discipline'. But on the other hand the student must have the courage to formulate, when ready to do so, observations into hypotheses or rational generalizations, for, as Bacon has told us, 'Truth can emerge sooner from error than from confusion' 3.

In designing the study I had been impressed by findings reported in the extensive literature that exists on what we call the placebo response and which show clearly that pill size, pill colour, physician and patient expectation of outcome, milieu, belief, technique, invasiveness and a whole host of other factors all significantly affect outcome 4. We know this. We acknowledge and try to control for this in the placebo controlled trial. I wonder, however, if we are in danger of 'throwing the baby out with the bath water', of 'ignoring the many-splendoured thing' in not pursuing the placebo phenomenon more closely. In trying to examine the results of the Oxford Acupuncture Study critically, certain facts have continually intrigued me.

One of these is that there was no evidence in the extant literature to suggest that any one particular form of acupuncture would be more or less effective than any other. It was important therefore that patients entering the study were not told that there would be an 'active treatment' and a 'placebo/sham treatment' for two quite clear and specific reasons. First, we did not know whether one would be 'active' and the other 'inactive'. To say that there was an 'active' group and a 'placebo' group would have been to prejudice the trial in the minds of both the patients and the investigators, exposing a preconception before it had even begun. Second, and in response to the first, we wanted to maximize the placebo response in both groups. In telling the patients that we were trying to 'see whether acupuncture could be useful in treating their disabling breathlessness' we sought to achieve this and in so doing we considered we would be examining the effect of the type of acupuncture more stringently since all the patients believed that they were receiving the best that we could offer them and had their best interests in mind.

In the remaining two weeks, following the end of the blinded trial period, all subjects were offered acupuncture by the Chinese physician until she had to leave the United Kingdom, at whatever frequency she thought necessary. Once she had left, TCA at a much reduced cost was offered to all subjects. A minimal charge was levied because TCA was not available on the NHS and would have to be provided by the acupuncturists involved, in their Oxford clinics.

In relation to this, two facts continued to haunt me long after the study was published. First, the most dramatic response occurred in a patient in the 'placebo' group. This subject increased his walking distance by over 100 per cent and experienced a radical change in his well-being, level of breathlessness and activities of daily living. Indeed he said his whole outlook on life had changed. Second, only two of the twenty-six people involved in the study went on to have regular acupuncture treatment at the reduced rate of £5 per session. Both these patients were in the 'placebo' group. None of those from the TCA group, even those who had experienced dramatic changes in their activities of daily living, well-being and breathlessness scores, wanted treatment if they had to pay anything for it. To my mind these findings and their implications are as important as the statistically highly significant effect which our trial had demonstrated for TCA in treating chronic disabling breathlessness, if not more so.

What were the mechanisms of action in the two groups and in this regard how does one evaluate the possible effect of the acupuncturist as an 'active' element? This clearly needs further investigation. The only way, it seemed to us, that we could investigate this in the context of a genuine evaluation of TCA was to look at the efficacy of a number of practitioners, ideally of differing styles, in treating similar patients, to see whether one or other acupuncturist(s) had a better treatment record than his or her colleagues. Of the ten acupuncturists who had been associated with the design of our trial only three agreed to participate in such an experiment. What does this mean? How else can one evaluate the effect of the therapist in TCA and other such practitioner-dependent therapies?

Increasingly it seems to me that something essential can be transmitted or effected by the therapist, even at a distance. This is perhaps why so many practitioners, whether orthodox or alternative, are unwilling to submit to such close personal observation, for if the results of such study were to confirm the hypothesis that the practitioner is critical to the outcome, over and above the efficacy of the technique alone, then it would mean that it is not so much what one does but how one does it that is important. This evasive attitude towards therapist observation is, to my mind, very sad. We need to understand such phenomena in much greater depth if we are to train our doctors and alternative practitioners to maximum effect.

The only concrete evidence that I have seen to substantiate this idea is reported by Reilly and Taylor in their monograph 'Developing Integrated Medicine' 5 . In their Overall Progress Interactive Charts they show, quite clearly, that knowledge of the trial design *alone*, even in a triple blinded study design, is sufficient to radically affect responses. Such evidence combined with an increasingly detailed reflective dissection of our own work demands that one ask 'What matters: mind or matter?' The results of such studies as ours and Reilly and Taylor's indicate that mind is matter and matter mind, and therefore that both mind matters and matter minds. The question is whether this matters enough for us to mind enough to encourage further study and to harness what is discovered to maximum benefit.

References

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