## **LETTERS TO THE EDITOR**

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## Editorial Commentary

## **Acupuncture and IVF Contoversies**

The following letter from Belinda Anderson and Lara Rosenthal is directed at a series of articles relating to acupuncture from the May 2006 issue of Fertility and Sterility.

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To the Editor:

In the May 2006 volume of this journal three clinical trials (1–3) investigating the use of acupuncture to improve the outcome of IVF were published along with two critiques (4, 5). The latter addressed many of the methodological and statistical limitations of these trials. However, none of these publications critiqued the acupuncture protocols themselves. There are three central issues: dosage, fixed protocol bias, and validity of intervention.

The dosages of acupuncture employed in these trials were very low (two to three treatments). In standard clinical practice, acupuncture is ideally administered once or twice a week over a period of weeks or months, especially for conditions such as infertility, which are often associated with long-standing deficiencies and imbalances from a traditional Chinese medicine (TCM) perspective. It is possible that higher dosages would have resulted in greater efficacy.

Fixed protocol bias is when the same acupuncture treatment protocol is administered to all subjects regardless of TCM diagnosis. Treatment of infertility in TCM begins with the diagnosis of primary and secondary patterns, based on the grouping of signs and symptoms that are assessed using standard examination techniques. This diagnosis then directly determines the choice of acupuncture points. Most acupuncture clinical trials do not include TCM diagnosis and instead use standardized acupuncture point formulas that are appropriate for a generalized hypothetical subject. This fixed protocol bias reduces the likelihood that the treatment will be appropriate and effective for individual subjects.

Smith et al. (2) are to be commended for including a TCM diagnosis in their protocol; however, it was used to determine only one of the three acupuncture treatments.

There are over 400 commonly recognized acupuncture points, each having specific actions and effects. Acupuncture point selection is based on the TCM diagnosis and treatment principle. The choice of acupuncture points in these studies was often difficult to understand and justify and without a high degree of similarity to suggested protocols in TCM texts. Furthermore, some points (Sp6 and LI4) are contraindicated in pregnancy and may therefore be unsuitable after ET. This may explain the Westergaard et al. (3) outcome of a greater early pregnancy loss in the group who received acupuncture 2 days after ET.

The above-mentioned factors significantly limit the external validity of these trials. For future trials, we recommend engaging trained acupuncturists to facilitate the incorporation of TCM diagnosis, individualized acupuncture treatments, appropriate acupuncture dosage and point selection, and detailed reporting on all aspects of the acupuncture intervention.

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