Reviewer’s report

Title: Acupuncture and physical exercise for affective symptoms and health-related quality of life in polycystic ovary syndrome: Secondary analysis from a randomized controlled trial

Version: 1 Date: 31 March 2013

Reviewer: Anuja Dokras

Reviewer’s report:

This manuscript is a secondary analysis of a RCT examining the effects of acupuncture, exercise and a control arm on depression, anxiety and QOL indicators.

Major Compulsory revisions

1. Did some PCOS subjects have only acne as their criteria for hyperandrogenism? Acne alone is not a recognized criteria in most definitions of PCOS. Did the authors check serum male hormone levels?

2. The acupuncture sites were selected to be innervations for the ovaries and there were only 2 sites to enhance CNS effects. If this study had been designed to primarily determine the effects on depression, anxiety and HRQOL, would different innervation sites have been selected. The authors should discuss these limitations in the Discussion.

3. Table 1 - show the demographic differences in the 3 group. Omit the combined PCOS QOL scores.

4. The descriptive part of the Results should be described under the headings of Depression, anxiety and QOL. to improve clarity. Also, describe the direction of changes rather than mentioning that the scores differed. Also, add if the difference was significant.

5. The strength of this study is the inclusion of the control group, so it is important to highlight differences between the acupuncture group compared to controls first and then related to the exercise group.

6. in the Discussion the authors state that they demonstrated a decrease in depression and anxiety scores at 32 weeks (second line of discussion). Is this accurate? The depression scores are not significantly different compared to controls. Please make changes throughout the Discussion if the authors agree that only the anxiety scores in the acupuncture group were significantly different compared to controls (Table 4).

7. Please elaborate for the readership what a change in the infertility score indicates within a 32 week period?
8. Why were improvements in the anxiety scores in the acupuncture group seen at 32 weeks but not at 16 weeks. Please elaborate in Discussion.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

No to all