Reviewer's report

Title: Acupuncture in patients with cold hands sensation: study protocol for a randomized controlled pilot clinical trial

Version: 3  Date: 11 June 2014

Reviewer: Seungmin Lee

Reviewer's report:

Major Compulsory Revision

1. On page 2 and page 5 (Background) The authors mention that there has been no published RCTs evaluating the efficacy of acupuncture for cold hands. However, two RCTs (Hahn 2004, Appiah 1997) evaluating the efficacy of acupuncture on patients with Raynaud's phenomenon (RP) has been published. The background of this manuscript is mostly on RP and since it intends to include patients with RP, this should be mentioned. The authors should also explain what makes this study different from the previous two.

2. On page 6, 5th line from the top. The authors state that the trial will run for 5 weeks. However, environmental temperature may strongly influence RP. The authors fail to mention any measures that they will take to control for such temporal changes. The author needs to further delineate the approximate season or months that the study will take place in or even better, make measures (record temperatures etc.) to control for bias.

3. One page 6-7 Inclusion/exclusion criteria: There are no criteria for smokers and non-smokers. This is an important factor in RP.

4. The relatively small number of participants suggest the possibility of a type 2 error. If possible, explain how the sample size was calculated.

5. Page 8 - Acupuncture treatment: The authors need to further explain who will perform the acupuncture treatments. They have to also describe how the acupuncture points were selected. There are no references.

6. Page 10 - Frequency and duration of cold hands episodes: The authors need to describe how they are planning to record the frequency and duration of each episode of cold hands. Will they be relying on patient diaries? Please specify.

Minor Essential Revisions

1. On page 8 - Acupuncture treatments: There is a typing error in one of the acupuncture points. LI4 should be changed to LI4.

2. On page 20 - Table 1.: The check boxes for acupuncture treatment do not correlate with the explanation in the methods. There should be 3 acupuncture sessions on the first week and acupuncture treatment should end on the 3rd
week.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests.