Reviewer's report

Title: Motion style acupuncture treatment (MSAT) for acute low back pain with severe disability: a multicenter, randomized, controlled trial protocol

Version: 2 Date: 17 August 2011

Reviewer: Ronald Feise

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Major Compulsory Revisions: This study does not follow all the CONSORT guidelines.

1. Background, page 5: “Motion style acupuncture treatment (MSAT) is different from traditional acupuncture treatments, and it has been shown to be clinically effective for acute back pain treatment in South Korea.” Provide citations for this statement or remove. If the MSAT has already been shown to be effective, what is the purpose of your study?

2. Sample size, page 9: Declare clinically important effects (e.g., > 0.5 effect size). Does that change your sample size calculation?

3. Secondary outcome measures, page 13: Provide the psychometric qualities (reliability, validity, and responsiveness) of the this modified 4-item ODI measure. You cannot assume that the validated 10-item measure and a your 4-item measure are the same.

4. Secondary outcome measures, page 14: Describe the psychometric qualities (reliability, validity, and responsiveness) of SLR and ROM. Are their psychometric qualities good enough to use as a measure in your study?

5. Statistical Analysis, page 15: Statistical testing via a t-test is inappropriate and irrelevant. Provide effect size and/or number needed to treat to your statistical calculations with a measure of precision (e.g., 95% confidence intervals).

6. You need to discuss that you will provide a diagram of the flow of participants through each stage of the study.

7. You need to discuss that you will provide data on adverse events.

8. You need to discuss that you will measure and report the success of your blinding schemes.

9. Most importantly, you must follow-up on patients beyond one-half hour after therapy. Durability of an intervention is important to patients and providers. You should follow participants at least 6 months after the intervention. You cannot establish effectiveness from one short-term measure and cannot adequately test your hypothesis.

This study is germane to health care professionals and their patients. I encourage the authors to modify their design.
Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

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

Declaration of competing interests:

I declare that I have no competing interests.