Reviewer's report

**Title:** The effectiveness of moxibustion for the treatment of functional constipation: a randomized, sham-controlled, patient blinded, clinical trial

**Version:** 2  **Date:** 26 September 2011

**Reviewer:** Per G Farup

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The paper describes a small, but well performed randomized controlled trial (RCT) comparing treatment with moxibustion and placebo for constipation. I have no major objections, but several minor objections/proposals that should be addressed/commented upon by the authors.

1. **Abstract.** Most readers don’t know what moxibustion is. Could it be explained in a few words? The same applies to qi deficiency and qi excess. The abstract is difficult to understand for readers from my part of the world without knowledge of these words which, however, are explained in the paper. If you are short of words, leave out some of the within group results (see below).

2. **The primary outcome of an RCT is the comparison between the two randomized groups.** Please give these results first, followed by the results of the analyses within each of the groups (or leave out the statistical analyses of the results within groups). This applies to the abstract and the paper.

3. **The results of the comparisons between the groups (the primary outcome) are not reported in the abstract which only says that p > 0.05.** Please give the results (the differences between the groups) with 95% confidence intervals (CI). In general for the whole paper, give the main results with 95% CI.

4. **Page 7 – the Constipation Assessment Scale (CAS).** If I understand correctly, there are eight items scored from 0 to 3. Does it mean that CAS has a score from 0 to 24? Please explain.

5. **Page 8 – statistics.** The sample size calculation is missing. What is the power of this small trial to show a clinically significant effect? Please report the sample size calculation made before starting the trial. The small trial makes a type II error rather likely, should you discuss the possibility in the “Discussion” section?

6. **Page 10, the end of the first paragraph:** “….. there was a difference between the groups in terms of weight (Table 1)”. According to table 1, there was also a difference in the BSS score.

7. **Page 10 – primary outcome.** See p2 above. Please rearrange with the primary outcome first and give the results with 95% CI.

8. **The conclusion – last sentence:** “….. are needed to verify the effect…”. The sentence shows that the authors believe that there is an effect. I would prefer:
“More rigorous studies with larger sample size are needed to verify if there is an effect of moxibustion....”

9. Table 1 and 2: It is written at the bottom (footnote) “ * p<0.05, by.....”. What does the “ * ” mean? Table 3: When the p-value in the table is 0.03, it is not necessary to explain in the footnote that p<0.05.

10. Figures 3 and 4: the titles are: “Changes in defecation.....”. Is it correct that the figures show the changes, or do they show “Frequency of defecation....”? I think that it is impossible to show changes at baseline, and that the figure shows the frequency of defecation (number per week) at different points of time.

11. Figures 3 and 4: What are the points, I guess that it is the mean. What are the error bars, is it SD, SEM or confidence interval of the mean? Please make it clear on the figures.

12. Figures 3 and 4: There are no significant differences between real and sham moxibustion (fig3) and qi excess and qi deficiency (fig4), except for qi excess and qi deficiency at week 4 (p=0.03). I think both significant and not significant differences should be shown clearly on the figures.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**

I declare that I have no competing interests.