Reviewer’s report

Title: Electroacupuncture versus Diclofenac in symptomatic treatment of Osteoarthritis of the knee: a randomized controlled trial

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Reviewer: Dr Flavia Cicuttini

Level of interest: not specified

Advice on publication: Other (see below)

1. Are the conclusions drawn adequately supported by the data shown: if not, what are the shortcomings and could they be overcome?

The authors have taken great care in designing this study to minimise problems experienced in previous such studies. The study subjects have very severe osteoarthritis with about 60-70% having Kellgren Lawrence grade 4. This needs to be considered further in terms of generalizability of this study to people with OA. It is not likely that there will be a very beneficial effect of a NSAID in this group.

2. Are sufficient details provided to allow replication of the work or comparison with related analyses: if not, what is missing?

I think that there are some problems in interpretation of the data. Examination of Table 4 shows very little difference between the treatments in the outcome variables apart from VAS and pain index. These results are presented for week 4. They don't seem to have been adjusted for baseline values. Again, Figure 2 may be misleading. It is the change between groups on treatment that is of interest, not whether each group changed from baseline. As we can see, there was a significant improvement in the placebo group. Also the difference between groups at 4 weeks is misleading as some groups had higher baseline pain levels and
so there may be some regression to the mean. The same comments can be made for Figure 3. In Table 4, the pain difference in the 4 groups ranges from 4-6 (with individual ranges of 0-16), and similar small differences are seen for stiffness. This really questions the clinical significance and usefulness of these effects.

I am concerned about placing too much reliance on the orthopaedist's opinion and the patient's opinion since about 50% had significant bruising on the treatment, making blinding very difficult. I would suggest that the more objective measures are not strongly supportive of group differences. They may be less so when baseline differences are taken into account.

3. Does the manuscript adhere to the relevant standards for reporting and data deposition: if not, in what ways?

Yes it did.

4. Is the writing acceptable?

There are some typographical errors. Some attention to editing this paper further would improve it. For example, some sentences are too long.

**Competing interests:**

None declared.