Reviewer's report

**Title:** Enhanced sensitivity to punctate painful stimuli in female patients with chronic low back pain

**Version:** 1  **Date:** 11 July 2012

**Reviewer:** Richard Chapman

**Reviewer's report:**

This study demonstrates punctate hyperalgesia in female patients with low back pain compared to matched healthy controls. The investigators followed the protocol put forward by the German Research Network on Neuropathic Pain, and this is a strength of the study. The work has no significant flaws and the study is a valuable contribution to the literature on low back pain. There are no major compulsory revisions.

**Minor Essential Revisions**

The paper needs some improvements before it is ready for publication. Under Participants, please specify gender and offer some rationale for not using both sexes. In Methods, it is unclear whether the investigators performed the stimulation unilaterally or bilaterally. In Discussion, Limitations and Further Directions, sentence two mentions effect sizes but unless I am missing a table, the text does not report effect sizes. It might be a good idea to do so in light of the small sample sizes (discretionary).

Writing quality is uneven. While the results are quite lucid, the Background needs improvement. The last sentence in the first paragraph is nonsensical. Paragraph 2 line one, replace “was shown being” with “is.” Line 6 in the same paragraph, replace “was demonstrated being” with “is.” In the same line, “Unexpectedly” seems out of place and would read better as “However.” Last sentence, “reduces” should be “reduced.” The final paragraph in Background is difficult to read, and it is very important because it states the hypothesis. I suggest: “We hypothesized that CLBP patients exhibit increased sensitivity to punctate mechanical stimuli on both paraspinal lumbar areas and dorsal and palmar aspects of the hand compared to matched healthy controls.” Perhaps it should say noxious punctate mechanical stimuli. Methods, Participants, paragraph two, line one, I suggest, “To evaluate our hypothesis we tested pain sensitivity to…” Sentence 2, delete “also recruited that were…”

**Discretionary Revisions**

Finally, in Discussion, Limitations and Further Directions, it might be useful to say more. Testing only females is unusual and there may be concerns about how well the results will generalize to males. There is no report of tracking menstrual cycle or testing at only specific phases of it as many investigators do. This may merit a comment.
Level of interest: An article of importance in its field

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

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
'I declare that I have no competing interests.