Reviewer’s report

Title: The effectiveness of motorized lumbar traction in the management of lumbo sacral nerve root pain: A pragmatic randomised controlled trial

Version: 2 Date: 12 September 2007

Reviewer: Helen Frost

Reviewer’s report:

General
The authors have addressed most of the comments. The paper would be useful reference for other researchers considering a trial of traction but the study is small and therefore has limitation. I am not convinced a large study is justifiable looking at the results of this feasibility project. A larger trial is unlikely to demonstrate clinically significant differences between groups and would require an expensive multi-centre trial. In my view it would only be justifiable with the addition of an adequate control.

The authors have used non parametric descriptive statistics and now report that the data were skewed. If this was the case why did they use parametric statistics in the first version with such a small sample size?

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1) My main concern is the reporting of intention to treat analysis as the figures still do not add up. On the consort flow diagram the authors report that in the traction group 2 patients failed to complete treatment and one failed to return outcomes yet in the intention to treat analysis only 13 rather than 15 patients were included. The same mistake has been made in the manual therapy group. Intention to treat analysis should include all patients who return outcome questionnaires regardless of the treatment they did or did not receive. The last value carried forward method is used to replace missing data and this should be explained. I am still not sure whether an intention to treat analysis has been carried out as the consort flow diagram implies that it hasn’t. Insertion of the number of patients analysed in each group on Table 3 and 4 would clarify this.

2) I would prefer to see a measure of variability around the median points on the graphs

3) A reference for the method of randomisation would be useful (page 5).

4) Justification for a larger trial should be discussed relating to other recent trials bearing in mind that this feasibility study suggests that no differences would be found between groups.
Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1) As the focus of the paper is a feasibility study it would be useful to have more details of the power calculation and a reference for choice of the method used.

2) Grammatical errors on page 1 (conclusion line 1, page 12 (2nd line), page 14 (line 8), page 3, para 3 (repetition), page 11, line 15.

Discretionary Revisions (which the author can choose to ignore)

Page 12, para 2. I would argue that using traction in isolation is not a limitation in the design of other traction studies.

**What next?:** Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

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

**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