Reviewer's report

Title: Trochanteric osteotomy versus posterolateral approach Function the first year post surgery

Version: 2 Date: 26 November 2010

Reviewer: Brian McGrory

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NB These are all Major Compulsory Revisions

1. Is the question posed by the authors well defined? YES

2. Are the methods appropriate and well described? NO. There is a methodological issue with the experiment design. There appears to be confounding factors of group differences between the osteotomy and non-osteotomy groups. Other than surgeon preference I have several questions:
   A. The number of cases seems exceedingly small for consecutive cases from multiple surgeons at a major hospital. B. Statistical analysis needs to be added. This should include a power analysis for number of cases, statistical comparison of group factors (including x-ray analysis), and statistical reporting on questionnaire and functional outcomes. C. Authors need to describe abduction strength testing methodology. D. Authors need to comment on type of surgery and surgical x-ray analysis, specifically differences in lever arm and femoral offset measurements between the two groups.

3. Are the data sound? UNKNOWN. Again, we need statistical analysis. Also, the authors need to specifically describe how post operative data was obtained in patients with complications such as dislocation and reoperation. Lastly, it may be helpful to break out osteotomy non-union patients to assess functional differences between that group and those not osteotomized as well as healed osteotomy patients.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition? YES

5. Are the discussion and conclusions well balanced and adequately supported by the data? YES

6. Are limitations of the work clearly stated? Depending on above, the authors may need to highlight weaknesses further.

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished? YES

8. Do the title and abstract accurately convey what has been found? YES

9. Is the writing acceptable? YES

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'