Reviewer's report

Title: Anteroposterior glide versus rotating platform low contact stress (LCS) knee arthroplasty: a randomised controlled trial

Version: 2 Date: 18 April 2007

Reviewer: Ching-Chuan Jiang

Reviewer's report:

General

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

This is a prospective at least single blind randomized comparative study with multiple investigating sites. The study is simple and direct. The primary endpoint is range of motion. The evaluators are blind.

The sample size calculation is OK.

However, the following points were not clearly addressed:

1. The estimated difference of ROM is 20°. It is a little bit too larger for a no-difference study clinically, when the standard deviation is as small as 20°.
2. How the FASTRAK system is used to measure the ROM should be addressed. Is there any potential bias?
3. Site variation should be considered, if any.
4. The statistics should address how patient withdrawal is to be handled, or an ITT analysis.
5. Since PCL may play an important role of the knee proprioception. If there is difference in proprioception between the two groups, it would likely due to the presence of the PCL in the AP glide group rather than the prosthesis itself.
6. The measurement of proprioception in this study is carried out in the plane of flexion and extension. It will be interesting to study the proprioception in the rotating plane of the knee.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

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Discretionary Revisions (which the author can choose to ignore)

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: Acceptable

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.