Reviewer's report

Title: Functional improvements desired by patients before and in the first year after total hip arthroplasty

Version: 3 Date: 5 February 2013

Reviewer: Hassan Ghomrawi

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Please number your comments and divide them into

- Major Compulsory Revisions

Introduction:
This paper builds on the assumption that patient desires and expectations were not assessed before and after surgery and propose to do so using an open text approach with further classification using the ICF system.

The reviewer feels that similar work has been done in this area and refers the authors to the work of Mancuso and colleagues who have developed the expectations surveys for the total hip replacement patients based on conversations with patients after which common themes were derived and formed the basis for the expectations surveys. The reviewer also refers the authors to other work by Mancuso et al. who assessed the fulfillment of expectations postoperatively.

Methods:
The reviewer does not understand the why the participants in this study were “asked to participate in a study investigating the effects of a walking skill training program starting three months after surgery”. Is this a by-product of another study where there is an intervention at 3 months? If so, wouldn’t perceptions change as a result of the training program, which would confound the effect of surgery? Acknowledging this in the discussion as a limitation of the study is not sufficient.

The reviewer is not clear on the process of how patients were recruited from the 2 hospitals. Were they consecutively recruited? Over what time period? These information should be clearly stated to determine if selection bias impacted the results.

The authors state that they have modified the PSFS question. Was this modification validated somehow?

Only one of the authors analyzed the free text data and linked it to the different factors of the ICF. The reviewer is concerned about this method and feels much
more confident in the classification if it was done by 2 reviewers and the answers were compared and found highly reproducible, especially that it is not clear from the text whether this process was conducted manually or with the aid of a text analyzing software. The authors themselves acknowledge some difficulty in assessing the free text in the discussion section.

The reviewer also feels that the analytic plan was not adequate enough to address the longitudinal nature of the data. Longitudinal analyses accounting for clustering of responses within patients may reveal some interesting trends. Even with the current method, there were no statistical tests suggested to examine if the differences observed were statistically significant.

Results:
The authors report that 64 patients completed the baseline, 3 months and 12 months assessments. Were there any who refused to participate? And of those who participated in the study at baseline, how many filled the 6 months only and the 12 months only? This information needs to be clearly stated in results.

As mentioned in the methods section, the assessments were treated and reported independently at each time point. It is not clear whether desires reported at each followup point were persistent from the prior time point, or new desires. The authors state that desires at 12 months were not related to age or sex. How was that determined?

The tables are generally confusing with no totals.

Discussion:
The second paragraph of the discussion section begins with “Some of the patients changed their desires during the one-year recovery period”. Was this stated in the results? If not, please do so since this paragraph builds on this result. This paragraph of the discussion also has other new results (comparing <65 and >65). These should be in the results section.

- Minor Essential Revisions
- Discretionary Revisions

Level of interest: An article of insufficient interest to warrant publication in a scientific/medical journal

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