Reviewer’s report

Title: Arthrofibrosis after TKA - Influence factors on the absolute flexion and gain in flexion after manipulation under anaesthesia

Version: 2 Date: 19 March 2011

Reviewer: Roger Componovo

Reviewer’s report:

Generally speaking, I feel that the paper addresses an important topic and that the findings are worth publishing. It represents a very small cohort however the largest in the literature on the subject. The methods are appropriate and well described. The data are sound. The title is appropriate. The writing is adequate. I think the data on obese patients is interesting and worth noting but number of subjects is so small. I feel that some the conclusions are not stated properly as I have provided below:

Discretionary Revisions

1) A power analysis would be nice. We are only discussing 39 patients here so it is hard to really accept too much from this paper. The authors do point out nicely their paper actually has a higher number of subjects than what is currently in the literature.

Minor Essential

1) Line 40- The word “an” should be “and”- typo
2) Line 203 typo- “39,68” should be 39.68
3) Lines 171-174- Although this information is useful, what we would also like to know is the complement data to what you have listed. For example, what % of patients that had TKA after more than two procedures developed arthrofibrosis out of your 858 patient cohort.

Major Compulsory Revisions

1) Line 63- “Poor” results after MUA are expected.... This comment is too harsh. The gain in flexion for the more than 2 operations group was 27.3 and mean flexion was 94.1. In a patient with preoperative motion of less than 70 degrees the gain was 39.68 and mean flexion was 100. How could you possibly say this is
a poor result. You have improved the patient tremendously and may represent an excellent result thus allowing them to ascend and descend stairs as well as standing up from a chair according to your reference of Laubenthal et al. I disagree completely with the conclusion then in line 65 that an earlier arthrolysis should be considered. Where is the literature to support this? I am not aware of it and if this is your conclusion you need to list references that support arthrolysis in this patient group. Also, given that only 8 patients were in the “two procedures or more group”, it is hard to make strong conclusions.

2) There is something wrong with the sentence in line 242- “on the other hand…” It seems to be a contradiction of the statement in lines 239-242.

3) Line 251-253- This statement requires some support from the literature or should be omitted.

4) Line 258-260- How important is this really when you consider that their gain in flexion was so good- see your statement from line 58.

5) Line 270-272- Conclusion is too harsh for reasons as above.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests