Reviewer’s report

Title: Patient and surgical factors affecting procedure duration and revision risk due to deep infection in primary total knee arthroplasty

Version: 0 Date: 24 Nov 2017

Reviewer: Yuichi Kuroda

Reviewer's report:

This manuscript is well-designed and the results are generally presented in a clear and organized manner. However, there are some minor concerns in the present study.

Minor comments:

Methods

Line 67. Data on patient related risk factors were collected; age, sex, comorbidity score (ASA (American Society of Anesthesiologists) classification), diagnosis and previous fractures or osteotomy to the knee.

The relationship between increasing BMI and prolonged operative time has been previously documented. A study of 273 patients undergoing TKA by Liabaud et al. showed a direct linear relationship between BMI and operative time. However, the authors did not include it in this study. The authors should include BMI in patient related risk factors.

Results

Line 110. Risk factors for prolonged procedure duration (≥110min) were male sex, young age, diagnosis other than OA, ASA 3+ patients, previous surgery to the knee, low hospital volume, perioperative complications, the use of CAOS, time period from 2005-2009 and implant brand (Table1).

The reason why implant brand affected the procedure duration was not disclosed in the manuscript. The authors should mention it in Discussion section.
Are the methods appropriate and well described?  
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?  
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?  
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?  
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