Reviewer’s report

Title: Analysis of Total Knee Arthroplasty revision causes in a tertiary care hospital in Germany

Version: 0 Date: 12 Dec 2017

Reviewer: Pedro Giglio

Reviewer’s report:

This is a relevant paper on the causes of revision TKA in a specialised tertiary hospital, which is expected to be different from registry data.

Abstract

-The term "primary revision" and "first revision" have been used in the paper. It would be better to use only one term, preferably "first revision"

Background

- Please include references to the claim that registry data "are not very specific and provided from many different persons who might have different judgements for categorizing the revision causes"

Methods

- Your work does not include time to failure, only time to revision. Please include this data or address this point in the discussion. As most patients are referred to your center, time between failure and revision could be source of systematic error.

- It would be helpful to understand the severity of revisions performed to include the frequency of the type of implant used (condylar vs hinged vs non-conventional/mega-prostheses) in early, late and re-revisions, if this data is available.

- Alignment was not included in the revision causes, as in some previous papers. This can be so because loosening or instability were the ultimate revision causes in this cases. Nevertheless, this point should be addressed on the discussion.

Results

In table 2:
- It would be interesting to include time to revision by all combined causes for all patients, early, late and re-revision groups.

Discussion

- For clarity in comparing of causes of revision with previously published data, it would be of value to the reader to include a table with causes and time to failure from the current and previous works, including data based on single or multi-center vs registry data.

- line 183: missing data (xx, yy, zz)

- line 214: untranslated german word

**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.

Unable to assess

**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?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

**Quality of written English**
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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