

# AUTHORS' REPLIES TO REVIEWER'S 1 COMMENTS:

## Criteria Checklist for New Manuscript Peer-Review

**1 Title.** Does the title reflect the main subject/hypothesis of the manuscript?

+ Yes, however, it does conflict with the methods where it is mentioned that all patients receive THA which they consider salvage surgery (p2, line 44). The title hints to a comparison of patient groups, but it is a single cohort study.

ANSWER: The title does not hint at a comparison between the two groups, since the terms "first implant" and "salvage surgery" refer to the revision procedure itself, thus it does not indicate two different groups of patients.

**2 Abstract.** Does the abstract summarize and reflect the work described in the manuscript?

+ The background section in the abstract doesn't mention IFF revision to THA at all.

ANSWER: It has been added in the revised version of the manuscript.

+ results section mentions all patients met inclusion and exclusion criteria, should be only inclusion.

ANSWER: It has been corrected in the revised version of the manuscript.

+ conclusion mentions higher rate compared to elective tha, but comparison isn't reported on.

ANSWER: It has been corrected in the revised version of the manuscript.

**3 Key Words.** Do the key words reflect the focus of the manuscript?

+ Only partially; osteoporosis was chosen as a keyword but isn't mentioned.

ANSWER: IFFs are fragility fractures, thus they could be found in osteoporotic patients.

**4 Background.** Does the manuscript adequately describe the background, present status and significance of the study?

+ p3 line 75; it mentions 8.2 PFFs, this is worldwide I assume?

ANSWER: It has been corrected in the revised version of the manuscript.

+ General remark: IFF and treatment are extensively discussed, and reasons for failure are only very shortly. No mention of possible results after conversion to THA. Osteoporosis and its consequences for treatment are hardly mentioned at all.

+ The significant contribution of the study to the current literature is not discussed.

+ There is no true hypothesis or research question mentioned. The study adds to the available body of evidence, the outcome is obvious and already known.

ANSWER: All the above-mentioned points have been addressed in the revised version of the manuscript.

**5 Methods.** Does the manuscript describe methods (e.g., experiments, data analysis, surveys, and clinical trials, etc.) in adequate detail?

+ Yes, methods are well described.

+ p4 line 114 describes osteoporosis as an inclusion factor, why exclude patients without osteoporosis? And what was the reason for excluding patients with BMI >35, Hb <10? This introduces selection bias.

ANSWER: Only patients with osteoporosis were included in the present study. Patients with severe obesity and patients with severe anaemia were excluded to not alter the study data. Patients with anaemia underwent Hb correction before recruitment.

**6 Results.** Are the research objectives achieved by the experiments used in this study? What are the contributions that the study has made for research progress in this field?

+ The results answer the research question, as it describes the outcome of conversion from IM nail to THA.

+ p5 line 152-153; the two patients dying within days of surgery should be counted as complications, not excluded.

ANSWER: The two patients who died within days of surgery have been included in the postoperative complications (2 out of 74, 2.7%)

+ There is no mention of the prostheses used for THA. Cemented vs. uncemented, etc. These choices may well have influenced the complication risk, especially the high rate of periprosthetic acetabular and femoral fractures. The same is relevant for the dislocation risk; where are DM cups used, large or small heads?

ANSWER: The THA implant details have been reported in the results section

+ 'original' fracture pattern classifications are not reported, but will definitely determine the following surgery and which implants can be used.

ANSWER: original fracture patterns have been reported in the results section

**7 Discussion.** Does the manuscript interpret the findings adequately and appropriately, highlighting the key points concisely, clearly and logically? Are the findings and their applicability/relevance to the literature stated in a clear and definite manner? Is the discussion accurate and does it discuss the paper's scientific significance and/or relevance to clinical practice sufficiently?

+ On several occasions the results of the study are compared to patients receiving elective THA, however these are not reported on in this study.

ANSWER: The study does not include patients receiving elective THA

+ Several choices of implants can be made and may drastically increase certain risks (such as DM cups or larger femoral heads for prevention of dislocation), these are not reported on nor discussed in the study. Almost all recorded complications mentioned in Table 2 except death and infection could be mitigated by choosing the right implants, it is unclear which implants were currently used.

ANSWER: The THAs details have been reported in the results section

+ The obvious conclusion to this study is drawn, but it does not provide advice on what to do or which studies should be performed.

ANSWER: Conclusions have been improved in the revised version of the manuscript

**8 Illustrations and tables.** Are the figures, diagrams, and tables sufficient, good quality and appropriately illustrative, with labelling of figures using arrows, asterisks, etc, and are the legends adequate and accurately reflective of the images/illustrations shown?

+ no. The included Figure 1 shows the cut-out of a standard intramedullary nail. As the lesser trochanter was fractured originally, the choice of the implant was at least dubious, they should have used a long nail in the first place (which would not have prevented a cut out of the collum screw). The radiograph after revision to THA shows a hemiarthroplasty, not a THA. This doesn't seem to be the best example for a figure in this study. The female patient is aged XX.

ANSWER: The patient's age has been added to the figure description. This study aims to highlight also the importance of nail choice in patients with fragility proximal femur fractures

**9 Biostatistics.** Does the manuscript meet the requirements of biostatistics?

+ N/A

**10 Units.** Does the manuscript meet the requirements of use of SI units? –

**11 References.** Does the manuscript appropriately cite the latest, important and authoritative references in the Introduction and Discussion sections? Does the author self-cite, omit, incorrectly cite and/or over-cite references?

+ Yes, it is adequate.

**12 Quality of manuscript organization and presentation.** Is the manuscript well, concisely and coherently organized and presented? Is the style, language and grammar accurate and appropriate?

+ There are some questions on why certain patients were excluded from the analysis. Generally, it is organized adequately. It lacks a research question to start with and therefore doesn't clearly answer a question.

**13 Research methods and reporting.** Authors should have prepared their manuscripts according to BPG's standards for manuscript type and the appropriate topically-relevant category, as follows: (1) CARE Checklist (2013) - **Case report**; (2) CONSORT 2010 Statement - **Clinical Trials study, Prospective study, Randomized Controlled trial, Randomized Clinical trial**; (3) PRISMA 2009 Checklist - **Evidence-Based Medicine, Systematic review, Meta-Analysis**; (4) STROBE Statement - **Case Control study, Observational study, Retrospective Cohort study**; and (5) The ARRIVE Guidelines - **Basic study**. For (6) **Letters to the Editor**, the author(s) should have prepared the manuscript according to the appropriate research methods and reporting. Letters to the Editor will be critically evaluated and only letters with new important original or complementary information should be considered for publication. A Letter to the Editor that only recapitulates information published in the article(s) and states that more studies are needed is not acceptable?

+ STROBE statement is included.

**14 Ethics statements.** For all manuscripts involving human studies and/or animal experiments, author(s) must submit the related formal ethics documents that were reviewed and approved by their local ethical review committee. Did the manuscript meet the requirements of ethics?

+ ethical statement is included.

### Specific Comments To Authors:\*

Please make your specific comments/suggestions to authors based on the above-listed criteria checklist for new manuscript peer-review and the below-listed criteria for comments on writing. The criteria for writing comments include the following three features: First, what are the original findings of this manuscript? What are the new hypotheses that this study proposed? What are the new phenomena that were found through experiments in this study? What are the hypotheses that were confirmed through experiments in this study? Second, what are the quality and importance of this manuscript? What are the new findings of this study? What are the new concepts that this study proposes? What are the new methods that this study proposed? Do the conclusions appropriately summarize the data that this study provided? What are the unique insights that this study presented? What are the key problems in this field that this study has solved? Third, what are the limitations of the study and its findings? What are the future directions of the topic described in this manuscript? What are the questions/issues that remain to be solved? What are the questions that this study prompts for the authors to do next? How might this publication impact basic science and/or clinical practice? Please fill-in your specific comments to the authors below:

Thank you for the time spent preparing this manuscript.

It reports on a clinically relevant topic. It provides an overview of expected outcomes in a frail patient population.

This study adds to the currently available body of evidence but doesn't introduce a new finding or outcome. It lacks a clear scientific question and therefore also doesn't answer one. The outcome of this study is in line with earlier studies on revision THA after the failure of proximal femoral fracture management.

The study reports on the outcomes in this cohort but does not provide insights for future management of this patient category. There are no remarks on future directives for treatment and/or research. I think the current study does not have any impact on current clinical practice.

ANSWER: all the raised concerns have been addressed in the revised version of the manuscript

## **AUTHORS' REPLIES TO REVIEWER'S 2 COMMENTS:**

Review on manuscript, “**Total Hip Arthroplasty following the failure of intertrochanteric nailing: first implant or salvage surgery?**”

I think the topic of study is interesting. However, I suggest that authors consider the following points:

1. I suggest that the data of Tables 1 and 2 be presented by gender in another table.

ANSWER: The data are now presented by gender

2. The discussion section should be corrected. References in this section are not listed in order.

ANSWER: The references are now listed in order in the discussion section

3. I suggest authors add a list of abbreviations at the end of the manuscript.

ANSWER: A list of abbreviations has been added at the end of the manuscript.