Author’s response to reviews

Title: Prediction of fracture load and stiffness of the proximal femur by CT-based specimen specific finite element analysis: cadaveric validation study

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Author’s response to reviews:

Dear Editors and Reviewers:

Thank you for your letter and for the reviewers’ comments concerning our manuscript entitled “Prediction of fracture load and stiffness of the proximal femur by CT-based specimen specific finite element analysis: cadaveric validation study”. All the comments were very valuable and helpful in revising and improving our paper. We have revised the paper according to your and the reviewers’ instructions. The revised paper has been rewritten and improved according to the suggestions of the reviewers. We hope our changes are satisfactory to the editors and reviewers. The manuscript has been resubmitted to your journal. We anticipate your positive response.
#1 Herbert Cooper (Reviewer 1):

Please include all comments for the authors in this box rather than uploading your report as an attachment. Please only upload as attachments annotated versions of manuscripts, graphs, supporting materials or other aspects of your report which cannot be included in a text format.

Please overwrite this text when adding your comments to the authors.

This is a very well-designed study, the results of which have been summarized well in this article. The scope of the article is somewhat specific and will appeal to a limited audience but lays important groundwork for future work to build in hip fracture research. While this kind of FEA has been done in the past, the authors have provided a better model that incorporates the use of modern technology to more accurately simulate loading in an osteoporotic proximal femur. This model should, upon publication, replace prior modeling efforts for this purpose.

The authors have done a fine job in designing the study and describing their results in a logical, thoughtful manner. I believe this should be accepted for publication and will be of value to the field of orthopedics and musculoskeletal medicine.

Discretionary suggestions for improvement:

(1) Line 69 - authors suggest a large number of studies but provide only four references

(2) Line 71 - change "will" to "may"

(3) Paragraph beginning on line 215 - authors could better characterize the correlations found in their study with those found in other studies in the peer-reviewed literature

#1 Author’s reply:

Thank you for your kind review and valuable suggestion.

(1) We added further two recent references of CT-based finite element analysis of the proximal femur with femoral stem.


(2) We changed the word ‘will’ to ‘may’ as you pointed.

(3) We edited the article to characterize the correlations found in our study with those found in other studies

The revised portions are marked in red underlined sentence in the paper.

#2 Jian Dong (Reviewer 2):

The English writing should be improved.

- Consistency in using terms and abbreviations is important. Please check these carefully and change them appropriately.

- The abstract should be rearranged to emphasize what were done and which results were newly found.

#2 Author’s reply:

Thank you for your kind review and valuable suggestion.

We rearranged the abstract, and requested native English speaker proofread our article again.