July 18th, 2013

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 3621-Revised Manuscript Franklyn.doc).

Title: Computational and experimental analysis of tibial stress fractures using a rabbit model

Authors: Melanie Franklyn, Bruce Field

Name of Journal: *World Journal of Orthopedics*

ESPS Manuscript NO: 3621

The manuscript has been improved according to the suggestions of the Editor:

1. The format has been updated to comply with the format structure of the WJO:
    - The text has been changed to 1.5 spacing
    - Author contributions have been included
    - Full addresses have been provided for each author
    - The Abstract has been reworded into a structured Abstract format
    - An 100 word summary has been included under 'Core Tip'

2. The content of the Appendix has now been integrated into the main body of the paper under the title Mechanical Theory Predictions. As a result, the figures have all been renumbered. In addition, the section on beams (on the bottom of p 11 and top of p 12 in the original submitted manuscript) was amalgamated into the new Mechanical Theory Predictions section. Thus, all equations and discussion on tension in beams is now in the one section.

3. References and typesetting have been corrected. References are now in the correct format required for the *World Journal of Orthopedics*. In addition, there was one reference missing, which we have now added.

4. We have also changed the title slightly as we believe the new title is more representative of the content of the manuscript. Hence the title of the paper has been changed from 'Computational and experimental analysis of tibial stress fractures using a rabbit model' to 'Experimental and finite element analysis of tibial stress fractures using a rabbit model.'

Revisions have also been made according to the suggestions from Reviewer 1:

1. Tibial Stress Fracture (TSF) is now explicitly stated in the Abstract under the Aim. We have also stated Finite Element (FE) in the Abstract under the methods.

2. The reviewer had commented that they disagree that the rabbit and human tibiae are similar. On further consideration, we agree that the reviewer is correct and therefore we have altered this sentence from:

'Rabbit tibiae are also anatomically similar to a human, with the primary difference being the distal articulation of the tibiofibula complex: in the human it is near the ankle joint whereas in the rabbit it is at the tibial midshaft.' to
'However, the rabbit tibia differs anatomically to the human tibia, with one of the primary distinctions being the distal articulation of the tibiofibula complex: in the human it is near the ankle joint whereas in the rabbit it is at the tibial midshaft.' Please see p 3, paragraph 2 under the Introduction.

3. The spelling of the humerus has been corrected in two instances on the bottom of page 6 (under Material Properties) i.e. 'humoral bone' to 'humeral bone.'

Changes to the paper, including those suggested by the Editor and Reviewer 1, are highlighted in yellow. There have also been some changes made throughout the paper in order improve the readability of the manuscript. However, as these are all minor grammatical changes, they have not been highlighted in yellow.

Sincerely yours,

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