Reviewer's report

Title: A Biomechanical Study Comparing Two Fixation Methods in Depression Fractures of the Lateral Tibial Plateau in Porcine Bone

Version: 1 Date: 21 November 2012

Reviewer number: 3

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Comments and questions to the author

This biomechanical study compared the fixation strength between conventional subchondral screw fixation and interference screw fixation, using porcine knees. There has been few study about the biomechanical fixation strength for interference screw. In this point of view, this article may have some value for publication. However, there are several problems listing below and the author is required to reply. Therefore, we could not accept this article without appropriate answer to the questions below.

Materials & Methods

1) P3, line 47:
In this study, only one size of the depression has been evaluated (5mm in diameter). Different size of the fracture, smaller than 5mm in diameter and larger than 5mm in diameter, should be evaluated and described.

2) P3, line 52-57:
Post-operative X-ray of the knee joint should be seen in both fixation method.

3) P3, line 59- Biomechanical testing:
In this study, the author used the porcine knee joint, and put cyclic loading from 0 to 500N for 5,000 cycles at 3Hz. How did the author decide this loading condition? Is this condition in porcine knee physiologically same in human knee joint? There is no reference about this issue in this article.

4) P4, line 91-92:
There is no reference.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.