

January 7, 2014

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 6590-review.doc).

Title: Treatment of Distal Femur Fractures in a Regional Australian Hospital

Author: Ewan Batchelor, Clare Heal, Kimberly Haloran, Herwig Drobetz,

Name of Journal: *World Journal of Orthopaedics*

ESPS Manuscript NO: 6590

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

1 Format has been updated

2 Revision has been made according to the suggestions of the reviewer

Reviewer A.

1. Is evaluation of nonunion with 6 months of period reasonable?

There is evidence in the literature than non-union is optimally reviewed after a 6 month period. A longer time period was not feasible for the purposes of this trial

2. Is other plating technique using indirect reduction? Therefore, the fracture site vascularity is preserved. Operating techniques cannot be described too simply.

Data was categorized based on surgical management: less invasive stabilisation system (LISS) or alternative implants which include distal femoral nail (DFN), dynamic condylar screw (DCS), and angled blade plate (ABP). An effort was made to treat all fractures according to AO principles which means indirect reduction of the fracture site and anatomic reduction of the articular component in order to preserve vascularity of the bone. We feel that our operating techniques have been clearly described

3. The test used in continuous variables is not suitable due to small sample size (28 cases divided to three groups). Chi-square test is also unsuitable.

We in fact used fishers exact test because of the small sample size. This is specified in the document

4. Why a pneumatic tourniquet is not used to save blood loss?

A pneumatic tourniquet was not used because it would interfere with the incisions and is therefore generally not used for the treatment of these fractures

5. Pain measured by VAS and Lysholm score (also including pain) is overlapping, how to distinguish?

It is considered gold standard to use these two methods of measurement as primary endpoints even though we acknowledge that there is some overlap between the two scores

6. Results are reported too rough. How to define limb shortening and knee mal-alignment?

Non of the patients had a leg length pre-operatively as assessed radiologically. Limb shortening was therefore defined as any leg length discrepancy post-operatively. The same process was used for

determination of knee mal-alignment

7. Because the failure rate is high, causes of failure must be discussed in detail

We feel that our manuscript sufficiently discussed the causes of failure

Reviewer B

(1) This manuscript is quite well written and the study is current and relevant. However, while there were no significant differences with regard to patient demographics and co-morbidities or peri-prosthetic factors, the clinical outcomes (mal-union, knee flexion, implant failure from the LISS-R groups were much better than those from LISS-N groups. This needs to be more clearly stated and identified.

We feel that this is clearly stated in the manuscript and is the main focus of our discussion and conclusion

(2) Clinical experience of surgeons, amount of LISS training and adequate knowledge of the procedure... are relevant factors here. Since no patient would like to be treated with a non-recommended surgical procedure (except for consent for clinical trials), the authors need to clearly state the differences/similarities between the LISS-R and non LISS procedures. The LISS-N procedure is flawed and should be avoided.

Again, this is the main focus of this paper

(3) As mentioned, adequate surgeon training for LISS procedures should be emphasized irrespective of clinical experience of the surgeon. As already stated, the study lacks power for meaningful statistics to be performed. The authors should emphasize clinical outcomes rather than statistical significance.

We have clearly stated that the results were clinically but not statistically significant

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3 References and typesetting were corrected

Thank you again for publishing our manuscript in the *World Journal of Orthopaedics*.

Sincerely yours,



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