Mono versus polyaxial locking plates in distal femur fractures: a prospective randomized multicentre clinical trial

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Received: 6 May 2014 / Accepted: 12 May 2014 / Published online: 28 May 2014
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To the editor,

Hanschen et al. [1] have done an excellent study on mono-versus polyaxial locking plates in distal femur fractures, which found the polyaxial treatment tended to result in better functional and radiological outcome. However, we have some concerns regarding the paper and wish to share them.

Firstly, in figure 2 of this article, nine screws were fixed in the proximal part of the fracture site—could they make the plate too rigid? In our early experience using the LISS, fatigue fracture of the plate occurred in three patients because of this reason. And Smith et al. [2] also suggest that the plate should not be made too rigid because this can compromise both callus formation and secondary bone healing. If nonunion occurs eventually, the plate will fatigue fracture.

Secondly, the authors said their purpose was to investigate the outcome of LISS® vs. NCB®-DF treatment following complex fractures of the distal femur. However, during the study, there were 11 type 33-A of AO classification, which accounted for 40.7 % of all the patients (11/27). After searching all the English literature, we have not found a clear definition of complex distal femoral fractures. But the complex distal femoral fracture itself belongs to type 33-C of AO classification in most literature, which involves the articular surface of the distal femur [3–5]. Therefore, could the author give us an explanation for this?

Conflict of interest The authors confirm that there are no known conflicts of interest associated with this publication and that there has been no significant financial support for this work that could have influenced its outcome.

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