## LETTER TO THE EDITOR



## Letter to the editor about the article "Different surgical outcomes in a patient with bilateral atypical femoral fracture related to bisphosphonate use with or without teriparatide treatment"

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Dear Editor,

We recently read with interest the article titled, "Different surgical outcomes in a patient with bilateral atypical femoral fracture related to bisphosphonate use with or without teriparatide treatment" [1]. The authors mentioned that although the same surgical procedure was performed, its outcomes were different with or without teriparatide. However, we have a genuine concern about this case report.

We are doubtful about the success of the surgical treatment because of the discordance in the fracture reduction between both hips. Subtrochanteric femoral fractures have higher non-union rates compared with other anatomical regions besides atypical femur fracture (AFF) [2]. Risk factors for nonunion include varus malreduction, residual displacement after reduction, lack of medial cortical support, and bisphosphonate-associated fractures. In addition, many studies advocate the importance of fracture reduction for healing of AFFs [3–5]. They emphasize that varus malreduction could cause either a nonunion fracture or a delay in AFF treatment. Figure 1 of this case report shows definite varus malreduction and residual displacement, and we are curious about whether the left hip achieved satisfactory reduction and fixation postoperatively. If not, the outcomes would be poor regardless of teriparatide use.

We therefore seek clarification of the surgical results achieved and believe that the explanation provided by the authors is incomplete. With the ongoing debate on effects of teriparatide after surgical fixation of AFF, we worry that this report would unnecessarily mislead people. We hope that the authors address the points presented, as the overall discussion of the presented points will only serve to benefit the research community at large.

## **Compliance with ethical standards**

Conflict of interest None.

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