



Comment on Byun et al.: The effect of teriparatide on fracture healing after atypical femoral fracture: a systematic review and meta-analysis

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We read with great interest the manuscript by Byun et al. [1] entitled “The effect of teriparatide on fracture healing after atypical femoral fracture: A systematic review and meta-analysis” and congratulate the authors on their interesting and excellent meta-analysis study. Their manuscript showed the effect of post-fracture teriparatide (TPTD) treatment on atypical femoral fractures (AFF) using a pairwise meta-analysis focusing on delayed union, non-union, and fracture healing time in AFF.

The authors performed the present study following the Revised Assessment of Multiple Systematic Reviews and Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines. Seven articles were selected finally by meta-analysis including our manuscript (Ref. 22 [2]). We were very honored and pleased to be selected in this review study.

However, ref. 22 was a report of AFF focused on patients with rheumatic disease, not including any patients with non-rheumatic diseases [2]. It had just investigated eight patients with 11 AFFs. On the other hand, we had reported another report which had 87 patients with 98 AFFs in 2021 [3].

In fact, the population of our manuscript in 2021 (86 patients with a total of 99 AFFs [3]) declined one patient more than them in 2017 (87 patients with 98 AFFs [2]) due to data collection errors and insufficient data. In addition, two AFFs in 2021 increased compared to them in 2017 due

to bilateral AFFs in our second study from 2009 to 2014 [2, 3].

In this study, the meta-analysis was designed with five strategies. It was described “(5) were duplicates from the same investigation group” and “When study populations overlapped, we selected the publication with the largest population for the meta-analysis” [1]. Although ref. 22 seems to have been selected based on the above stipulation (5), only 11 AFFs in eight patients with rheumatic disease are included in the analysis in ref. 22. Therefore, it seems better that the manuscript of 2021 should be selected for this meta-analysis [3].

According to our results in 2021, teriparatide was not shown to accelerate the union of AFFs, although the numbers using teriparatide were relatively small (ten AFFs) [3].

Declarations

Conflict of interest None.

References

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