Author’s response to reviews

Title: Successful treatment of pathologic femoral shaft fracture associated with large arteriovenous malformations using a 3-dimensional external fixator and teriparatide: a case report

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February 25, 2019

Hayley Henderson
The Editorial in chief
BMC surgery

Dear Editor:

Thank you for your prompt comments to our manuscript entitled “Successful treatment of pathologic femoral shaft fracture associated with large arteriovenous malformations using a 3-dimensional external fixator and teriparatide: a case report”

According to the editor’s comments, the manuscript has now been completely revised. All changes to the manuscript are indicated in the text by using track changes.
Reviewer reports:

Reviewer 1:

#1 Case presentation: This part is very descriptive about patient's history. There are writing mistakes like "preformed" instead of "performed" in line 94. They should be corrected.

Response

Thank you for your comments. We corrected to “performed” in line 94.

#2 I have some concerns about patient's follow up. The authors do not give any information about their follow up protocol. Did you give any external support such as a Sarmiento like brace after the removal of the external fixator? In last radiographs the femur seems so weak and it may cause refracture. In that point I would like to ask if the mechanism of injury was a simple fall or a fall from height? If it was a simple fall that would support my concerns about refracture and I would prefer to use a brace.

Response

Thank you for your valuable comments. As you mentioned, we gave a Sarmiento like brace after the removal of the external fixator. This patient still continues to use it. We mentioned about it as “She began weight bearing gradually with Sarmiento type functional brace” in line 138. The cause of fracture was slip and fall from standing. We also described as “due to a slip and fall from standing” in line 105. Thanks again for your suggestions.

#3 Discussion and Conclusion: In that part the authors give information about AVM and the reason they used Teriparatide during fracture management. They discussed the literature. There should be a paragraph related with the time for fracture healing. The authors claimed that the femur united in 13 months. It is too much for fracture healing and they should discuss reasons. In addition they should clarify why they waited without any additional procedure or medication.

Response

Thank you for your valuable comments. We considered the delayed union was due to the very thin femur which was caused by the extensive AVM surrounding the femur. And It was extremity difficult to perform the additional bone graft due to the risk of massive bleeding. So, we needed to wait with only Teriparatide. We mentioned them in line 185-186.

#4 References: There are 21 references and most of them are recently published but "reference 11" was published in 1984. It can be replaced with a newer one.

Response

#5 Figures, tables additional files: There are five figures with multiple images (total of 17). I think this is too much for a case report and the number of figures should be reduced. There is no need to show the swelling in the thigh (Figure 2).

Response

Thank you for your valuable suggestion. We removed the Figure 2. And we also reduced to 6 from 8 images in Figure 1.

We thank the Editor and the reviewer again for their valuable comments, which have helped improve this paper. We are now confident that the revised version will satisfy all of the Editor’s and the reviewer’s concerns, and look forward to hearing from you soon.

With best wishes and highest regards,

Sincerely,

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