Reviewer's report

Title: Subcutaneous emphysema of the leg after hardware removal and bone allografting for infected non-union of the distal femur

Version: 0 Date: 10 Apr 2017

Reviewer: Zhenyang Mao

Reviewer's report:

Recommendation: Major revisions
Comments:

This manuscript reported on a male who developed leg emphysema after hardware removal and bone allografting for an infected non-union of the distal femur. The patient was managed by debridement of the surgical wound, antibiotic therapy, multiple fasciotomies, and application of a VAC (vacuum-assisted closure) system. This work is of valuable and a great experience for surgeon. However, certain revisions are necessary for more details. Please consider the following revisions for improvements of this manuscript.

1) The imageology data are quite important for orthopedics surgery. Can the authors show the X-ray or other imageological examinations of the distal femur pre-operative of hardware removal?


3) For suspicion of infected non-union, full spectrum of microbiological tests of samples are recommend. In my opinion, deep tissue samples including primarily non-union fibrous tissue, curetted bone and/or canal reamings, marrow cavity and secondarily sinus tract material should all be tested. What samples did you take? Would you please clarify those in the article?
4) It is mentioned in the report that the patient was allowed for weight bearing 14 days postoperatively the VAC system being removed. There were few information about the surgery process. Could you please provide some images of the non-union management during the surgery or non-union sites? Did you use any fixation alternatives after surgery?

5) In my opinion, this article needs some language corrections before being published

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

No

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

**Quality of written English**
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published
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