

Reviewer comments: Q1: Why is “unilateral fractures” an inclusion criterium? How did you treat bilateral fractures?

Response:

Thank you for your comments. Because intracortical screw technology is novel for the treatment of type 31A3 irreducible intertrochanteric fractures, we especially selected unilateral fracture as the inclusion criteria, mainly to avoid the selection deviation of patients. In clinic, bilateral type 31A3 intertrochanteric fractures are rare, and our experience is limited. For bilateral fractures, if one side can be closed on the traction bed, we will give priority to this side; the other side may be treated as irreducible fracture. If both sides are irreducible fractures, we may plan to use intracortical screw technology in one side first and then in the other side in lateral decubitus position.

Q2: In Discussions, you mention about the learning curve of young surgeons. Since all of your patients underwent CT scan with reconstruction, we recommend 3D modelling using a printer in order to better visualize the fracture and, eventually, to exercise reduction and surgery on printed models. Here is a reference about 3D printing that you can elaborate when talking about the learning curve: „The use of 3D printing in improving patient-doctor relationship and malpractice prevention” published in RJLM, DOI: 10.4323/rjlm.2017.279. You should compare your results with the literature, if possible.

Response: Thanks for your comments. After searching reference entitled The use of 3D printing in improving patient-doctor relationship and malpractice prevention by Google scholar, we agree with your comments. We have added “It is noteworthy that in recent years, with the development of 3D-printing technology, young doctors can shorten the learning curve by simulating surgery on 3D models and get familiar with the surgical skill”. Although we would like to compare the results with the literature suggested by the reviewers, the literature has no PMID number (it cannot be retrieved on PubMed). Therefore, we cited other latest related literature in this paper.

Q3: The manuscript lacks a proper Conclusion

Response: We have revised accordingly, and added the conclusion section as follows. For elderly patients with type 31A3 irreducible intertrochanteric fractures, intracortical screw technology plus limited open reduction is a novel surgical treatment modality and meaningful clinical attempt, which could achieve high-quality fracture reduction and fixation. A good clinical efficacy was attained without increasing operation time and intraoperative blood loss. This technology is worthy of further promotion and research.

Q4: English must undergo a revision. I.E. “elderly patients with osteoporotic.”

Response: The manuscript has been edited by a native English-speaker. “elderly patients with osteoporotic” has been corrected to “elderly patients with osteoporosis.”