

PEER-REVIEW REPORT

Name of journal: World Journal of Clinical Cases

Manuscript NO: 69583

Title: Outcomes of different minimally invasive surgical treatments for vertebral compression fractures: An observational study

Reviewer's code: 03963486

Position: Editorial Board

Academic degree: PhD

Professional title: Associate Professor

Reviewer's Country/Territory: China

Author's Country/Territory: Taiwan

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Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-07-21 01:30

Reviewer performed review: 2021-07-24 08:08

Review time: 3 Days and 6 Hours

Scientific quality	☐ Grade A: Excellent ☒ Grade B: Very good ☐ Grade C: Good ☐ Grade D: Fair ☐ Grade E: Do not publish
Language quality	☒ Grade A: Priority publishing ☐ Grade B: Minor language polishing ☐ Grade C: A great deal of language polishing ☐ Grade D: Rejection
Conclusion	☐ Accept (High priority) ☐ Accept (General priority) ☒ Minor revision ☐ Major revision ☐ Rejection
Re-review	☒ Yes ☐ No
Peer-reviewer statements	Peer-Review: ☒ Anonymous ☐ Onymous Conflicts-of-Interest: ☐ Yes ☒ No

SPECIFIC COMMENTS TO AUTHORS

This study compares the postoperative safety and efficacy of different surgical intervention in treating vertebral compression fractures, including vertebroplasty, balloon kyphoplasty, and kyphoplasty with SpineJack or an intravertebral expandable pillar. The authors found that Kyphoplasty with SpineJack has good outcomes in kyphotic angle reduction and body height restoration, while vertebroplasty has the highest cement leakage rate and adjacent compression fracture occurrence. This study is meaningful for providing a reference to surgeons when choosing a safe and effective procedure for treating VCFs. However, there are some concerns that need to be addressed.

1. The inclusion and exclusion criterion should be introduced in more detail way. For the 354 patients included in the study, do they have some serious diseases that will affect the outcomes of different surgical treatments for vertebral compression fractures?
2. As the number and sex of patients are different for different treatment group, how to distinguish the effect of number and sex on the outcomes of different surgical treatments?