Author’s response to reviews

Title: Posterior decompression and occipitocervical fixation followed by intraoperative vertebroplasty for metastatic involvement of the axis

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Author’s response to reviews:

Dear reviewers,

We have responded to all the questions by the reviewers with answers and explanations and have revised our paper accordingly. We hope you will be satisfied. We are willing to provide further information if they think it necessary.

We thank the reviewers for valuable advice. We found the reviewers’ comments most helpful and have revised the manuscript. We have highlighted the revised sentences in red in the revised manuscript. In addition, the manuscript has been edited by a professional language editing service, American Journal Experts and you could check the certificate in the uploaded files.

Comment No.1 by the reviewer #1:

I believe that the English is insufficient for a scientific paper. There are plenty of linguistic errors that affect readability. The paper urgently needs proof reading.

Author: We are very sorry for the inconvenience brought by our poor English. Hence, we asked for a professional help in English language editing service suggested by the editor. Manuscript has been edited by American Journal Experts, a professional language editing service and changes are highlighted in red. In addition, you could check the certificate in the uploaded files.
Comment No.2 by the reviewer #1:

Regarding the methods section I suggest to describe the in- and exclusion criteria in a different way and to avoid double mentioning of criteria (the same criteria both as in and exclusion criteria).

Author: Firstly, thank you for your advice on our study and I will try my best to follow your suggestions. The same part in in- and exclusion criteria has been deleted and this could be checked in P3L61-64.

Comment No.3 by the reviewer #1:

Besides I would like to be informed about how many patients with metastatic axis-tumours were excluded from this investigation during the study period. Furthermore I would like to ask the authors to include a statement about the ethical approval for this study.

Author: There is a cancer center in our hospital and approximately 20-30% of patients with spinal metastasis do not meet the criteria of surgery due to the short life expectancy or poor condition. And in our study, 4 patients were excluded. This has been added in P3L64-65. In addition, a statement about the ethical approval has been added in P11L224-225.

Comment No.4 by the reviewer #1:

Given the small sample size of the study I suggest not to show descriptive data as median(std) but rather as median (interquartile range).

Author: Thank you for your suggestion and these has been corrected in Table 2 and P6L121-122.

Comment No.5 by the reviewer #1:

As the primary outcomes of this study are pain-assessment scores I believe that it is important to document whether the included patients were still on pain medication on the moment the pain scores were determined or not. Otherwise this factor will be an important confounder. Moreover I would like to suggest to add the usage of pain killers (including daily dose) before and after the intervention as an additional outcome-parameter to this study.

Author: In our study, when we determine VAS scores, patients were still on pain medication. The main cause of pain in our study was the pathological fracture of C2 and the instability of cervical spine. After surgery, the pain killers could be reduced by approximately 50% compared to the preoperative doses. Thank you for your suggestion, and we added this parameters to the article. You could check in P5L99-100 and P6L126-129.

Comment No.6 by the reviewer #1:

In addition, exact P-values are lacking and should be included.
Author: Thank you for your suggestion and the exact P-values has been added in Table 2 with highlights.

Comment No.7 by the reviewer #1:

Due to the small sample size of the study in my opinion figure 3 is superfluous.

Author: Thank you for your helpful advice and the figure 3 has been deleted.

Comment No.8 by the reviewer #1:

In the discussion section I suggest to remove repeated presentation of findings and statements from the introduction.

Author: I agree with your suggestion and the repeated part in discussion has been deleted and the discussion has been shortened.

Comment No.1 by the reviewer #2:

The topic is interesting. However the technique is already described in the literature (see below). The information is not really new.


Treatment of C-2 metastatic tumors with intraoperative transoral or transpedicular vertebroplasty and occipitocervical posterior fixation.

Papp Z1, Marosföi M, Szikora I, Banczerowski P.

Author: Firstly, thank you for your helpful comments on our study. Papp et al. reported a similar technique to treat C-2 metastatic tumors. However, there are several different parts between our technique and his. First, vertebroplasty procedures in their study are performed first and then immediately transported to the operating room for posterior fixation. But in our study, the laminectomy and removing the superior and inferior facet joints and pedicle were performed first. Then transpedicular vertebroplasty was performed during surgery. Intraoperative vertebroplasty in our study was accurate and visual to inject bone cement. The leakage of bone cement could be detected and cleared in time. And these has been demonstrated in P4L84-87 and Figure 1.

Comment No.2 by the reviewer #2:

Wording requires extensive revision.
Author: We are very sorry for the inconvenience brought by our poor English. Hence, we asked for a professional help in English language editing service suggested by the editor. Manuscript has been edited by American Journal Experts, a professional language editing service and changes are highlighted in red. In addition, you could check the certificate in the uploaded files.