

## Response to Comments:

Reviewer #1:

### Specific Comments to Authors:

1. Percutaneous vertebroplasty (PVP) represented by Balloon Kyphoplasty (BKP) is no longer advanced surgical treatment. It was frequently applied for the treatment of vertebral compression fracture all over the world. However, outcome of the treatment is not perfect. Sometimes neuralgia and deformity persist. Thus, it is an important information that selective nerve block relieved the residual neuralgia after PKP. However, the authors did not described detailed procedures concerning selective nerve block of dorsal ramus of spinal nerve and others. Body position, insert direction of nerve block needle, and related ultrasound image during the nerve block should be shown.

**Response:** We are very grateful to the comments. It's very meaningful to the main idea of this study. Thus, in this revision, we added a detailed description of the procedure for selective nerve block, in which the body position, insert direction of the needle and the ultrasound features were documented clearly. The specific contents displayed on Page 7, line 18 to Page 8, line 14. Moreover, a related ultrasound image showing typical echoes of the structures during the procedure was added to the figures, too.

2. On the other, description of PVP may be condensed because this treatment method is well-known and performed.

**Response:** We agree with the comment. In this revision, the description of PVP are deleted, and the figures showing the specific procedure of PKP are also condensed so as to highlight the management of selective nerve block.

Reviewer #2:

### Specific Comments to Authors:

1. Page 2, line 4... There was no radioactive pain... Or radiating pain?

**Response:** We apologize for this language error. It should be "radiating pain". We have correct this error in the revision (Page 5, line 15).

2. Page 3, line 1. Oswestry Disability Index. It is better to insert the abbreviation "ODI". ODI appears in page 6, line10. Easier for readers who are not familiar with ODI to read the article.

**Response:** We appreciate the suggestion very much. In this revision, the abbreviation "ODI" has been inserted behind the first appearance of "Oswestry Disability Index"(Page

5, line 17).

3. Figure 1. What is the purpose for displaying this figure?

**Response:** We appreciate the comment. The display of Figure 1 was initially set to show the pain area existed on the patient. However, it's indistinct and unnecessary. Thus, in this revision, we removed this figure.

4. Would the patient have the improvements in pain and pain-related disability associated with OVCFs if she received a course of nerve block treatment (as the management in T11 neuralgia)?

**Response:** We are very grateful to the comment. It's very to the point. We are sorry that we did not clearly analyze this issue in the primary submission. Neuralgia is an important component of pain in patients with OVCFs. As we mentioned in the manuscript, the specific mechanism of neuralgia in Kummell's disease is complex. The severely compressed T11 could also cause a back pain potentially because of the distorted facet joints and subsequent distorted rami posterior nervi spinalis. However, this is hard to be determined because there is co-innervation of dorsal ramus of spinal nerve. We consider the upper back pain in this case was mainly released by PKP at T8 and T9 due to the postoperative status. In this revision, we added the related results in the "outcome and follow-up" section (Page 8, line 20-21).

*Science editor:*

(There were 7 recommendations for modification suggested by *Science editor*, in which the 1 - 6 items were identical to the comments of the two reviewers, and they has been listed above.)

7. Please provide documents following the requirements in the journal's Guidelines for manuscript type and related ethics case report: Copyright License Agreement.

**Response:** We appreciate the suggestion. All the author have signed Copyright License Agreement.

*Company editor-in-chief:*

1. Before final acceptance, uniform presentation should be used for figures showing the same or similar contents; for example, "Figure 1 Pathological changes of atrophic gastritis after treatment. A: ...; B: ...; C: ...; D: ...; E: ...; F: ...; G: ..."

**Response:** We appreciate the suggestion. We have modified all the figures for the submission following the guideline of the uniform.

2. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor. If the picture is 'original', the author needs to add the following copyright information to the bottom right-hand side of the picture in PowerPoint (PPT): Copyright ©The Author(s) 2022.

**Response:** We appreciate the suggestion. All the figures are original documents, and we have arranged them in a single PowerPoint file. All the graphs, arrows and text portions can be reprocessed. The copyright information has been added to the position.