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Reviewer A

The authors reported a case of osteoporotic compression vertebral fractures highlighting the main difficulties of managing frail patients as the one object of this study.

Comment 1: I would recommend analyzing in the discussion paragraph other technical possibilities for the treatment of OVCF such as percutaneous short fixations (10.1016/j.wneu.2022.04.024. Epub 2022 Apr 12. PMID: 35427793.) and why these methods haven't be used in the case here reported.

Reply 1: Thank you for your valuable suggestions. We have incorporated them into the discussion section of the revised manuscript. A 68-year-old woman, with a 40-year history of rheumatoid arthritis (RA), received long-term prednisone treatment. She exhibited severe osteoporosis, skin atrophy, and compromised physiological function. Open fixation surgery resulted in excessive bleeding and poor incision healing. The limitations of percutaneous short fixations include the inability to adjust screws or remove the fixation once the bone cement solidifies. Moreover, percutaneous short fixations do not entirely eliminatethe risk of recurrent vertebral fractures. Considering the associated surgical risks, our preference leans towards choosing PVP and PKP.

Changes in the text: we have added this in the discussion section of the manuscript (Page 10, line142-145).

Reviewer B

1. Highlight Box: please introduce the abbreviations in their first appearance.

Key findings

- We presented a case of spontaneous recurrent adjacent vertebral fractures in a patient of is OVCFs with RA. When PVP or PKP is carried out, the comprehensive treatment should involve anti-osteoporosis therapy, it can decrease the incidence of OVCFs and recurrent vertebral compression fractures.

What is known and what is new?

- Rheumatoid arthritis (RA) is a chronic systemic autoimmune disease, it is characterized by early manifestations of osteoporosis, the symptoms of osteoporosis are often more severe.
- RA with OVCFs lead to low back pain and spinal deformation. PKP and PVP are widely used in the treatment of RA with OVCFs. But anti-osteoporosis therapy is necessary ,because of recurrent vertebral compression fractures.

What is the implication, and what should change now?

- PKP and PVP can relieve pain and improve life quality of the RA patients with OVCFs. The treatment of RA can not be stopped, in order to prevent successional spontaneous recurrentvertebral compression fractures , anti osteoporosis therapy can not be neglected.

Reply 3: Thank you so much for your good suggestion, we have updated the formal writing in the revised manuscript.

Changes in the text: we have modified our text as advised(see Page 4, highlight box)

2. Please see if any reference should cite to the scores authors mentioned below.

84 computed tomography (CT), and magnetic resonance imaging (MRI) showed fresh fractures of L1 and L2
85 (Figure 2). Additionally, T value for bone mineral density was -4.1, which suggested osteoporosis; her visual
86 analog scale (VAS) and Oswestry disability index (ODI) scores were 8.0 and 86, respectively. The remainder

Reply 4: Thank you so much for your good suggestion, we have changed in the revised manuscript.

Changes in the text: we have modified our text as advised (see Page 6)

3. Reference(s) should cite to the Introduction section. Please check it.

Reply 6: Thank you so much for your good suggestion, we have changed in the revised manuscript.

Changes in the text: we have modified our text as advised (see Page 16, reference).

4. In general, the submission of a Case Report should be accompanied by written consent from the subject (or their parent/guardian) before publication; this is particularly important where photographs are to be used or in cases where the unique nature of the incident being reported makes it possible for the patient to be identified.

Describe this information in **both the “Case Presentation” section of Main Text and the “Ethical Statement” section of Footnote.**

- **Suggested wording:** “All procedures performed in this study were in accordance with the ethical standards of the institutional and/or national research committee(s) and with the Helsinki Declaration (as revised in 2013). Written informed consent was obtained from the patient for publication of this case report and accompanying images. A copy of the written consent is available for review by the editorial office of this journal.”

Reply 9: Thank you so much for your good suggestion, we have changed in the revised manuscript.

5. Figures

1) Each figure must be saved and submitted as a separate file. The preferred format for figures is JPG, TIFF, or PDF format.

2) Any abbreviations used in figures and tables or their description should be defined in a footnote beneath each corresponding table/figure. Even if they were explained in the main text, full terms must be presented again in the corresponding figures and tables, so that figures and tables can be read on their own.

Reply 11: Thank you so much for your good suggestion, we have changed in the revised manuscript.

Changes in the text: we have modified our text as advised.

6. References 18 and 20 are duplicate, please adjust it

Reply 12: Thank you so much for your good suggestion, we have changed in the revised manuscript.

Changes in the text: we have modified our reference as advised
