Regarding the Surgical Management of Vertebral Compression Fractures

To the Editor:

I read the recent overview of diagnosis and management of vertebral compression fractures with great interest by Alsoof et al.1 As they mentioned, determining when to refer a patient for surgical treatment remains a challenge when confirming a reduction in the height of the individual vertebral by 20% or 4 mm. According to guidelines,2 specific indications must include pain refractory to medical management for 3 weeks or achievement of adequate pain relief with intolerable side effects.

It is always essential to evaluate adverse events; an interesting metanalysis by Guo et al3 found no significant difference between surgical and conservative treatments. Nonsurgical management is not free of complications, and follow-up must be offered, emphasizing associated neurological symptoms.

The most feared complication in vertebral augmentation is cement leakage, especially to the epidural and foraminal space, and massive pulmonary embolization in the postoperative period. However, a usually forgotten complication is the augmented risk of new vertebral fractures reported up to 30% at 1 year.4 This demands a close follow-up, emphasizing low thoracic and lumbar levels.

Medial branch nerve intervention is a safer option to treat pain. In a prospective randomized controlled trial,5 the difference in pain relief between these 2 techniques was insignificant in the long term. The disadvantage is that it does not provide stability to the fracture, but the fracture heals, and pain remains in the posterior column of Denis. Another option that must be mentioned in cases of cancer-related bone pain is a single 8-Gy radiotherapy dose. It must be offered as early as possible for palliative, analgesic, or decompressive purposes and to prevent severe bone events, even for those with poor survival prognosis.6

Finally, a recent metanalysis7 demonstrated an overall positive and statistically significant effect of vertebral augmentation, especially when compared with nonsurgical management. So, this procedure must always be considered in the multimodal management of pain in this scenario.

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References

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