



Response to: Concerning Using Lordotic Cages at the L5–S1 Level Does Not Guarantee the Improvement of Sagittal Alignment in Patients Who Underwent Posterior Lumbar Interbody Fusion

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Thank you for providing us with the opportunity to respond to the concerns raised in the letter to the editor regarding our published article titled “Using lordotic cages at the L5–S1 level does not guarantee the improvement of sagittal alignment in patients who underwent posterior lumbar interbody fusion [1].” We appreciate the constructive criticism and would like to address the points raised.

The restoration of lordosis is indeed an important factor when considering the anterior location of cages [2]. In our study, we made efforts to insert the cages as anteriorly as possible to facilitate lordosis restoration. However, we encountered challenges in controlling the precise location of the cages due to the presence of a thick anterior longitudinal ligament (ALL). Consequently, we did not specifically intend for the cages to be placed in the anterior, middle, or posterior positions. Although the authors of the letter mentioned the potential risk of anterior cage slippage, we did not observe any cases of anterior cage slippage within the study population. However, we acknowledge that one case of cage dislodgement did occur at the L5–S1 level (not included in this study), which required the removal of the

cages through an anterior approach. Nevertheless, it is important to note that cage dislodgement is not a frequently encountered complication.

We agree with the opinion expressed in the letter that using more lordotic cages, such as those with 20° angles, may be a viable option [2]. By employing an insertion and rotation method, it is possible to achieve a greater degree of lordosis. However, many reports reported the degree of restoration of segmental lumbar lordosis is not that much as expected [3,4]. Probably, the location of cages and enough release of the disc space is more important factor [3]. Furthermore, it should be acknowledged that using more lordotic cages may have limitations, such as a narrower cage width, which can potentially lead to nonunion.

The placement of cages in an anterior position is associated with a higher lordotic angle, which translates to greater lower lumbar lordosis. It has been reported that maintaining an ideal lower lumbar lordosis can lead to improved clinical outcomes [5].

In our manuscript, we described the statistical methods employed, including the Student t-test, chi-square test,

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and correlation analysis, to analyze the data. These methods were chosen based on their appropriateness for the type of data and research objectives.

We sincerely appreciate the interest shown in our paper and once again thank the authors of the letter for their valuable input.

Conflict of Interest

No potential conflict of interest relevant to this article was reported.

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Author Contributions

All authors provided the same amount of effort for preparation of this commentary.

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