LETTER TO THE EDITOR

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Response to the letter regarding "Evaluation of post-operative skeletal stability after sagittal split ramus osteotomy and contralateral intraoral vertical ramus osteotomy in asymmetric mandibular setback"

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We sincerely thank the reader for their thoughtful and constructive comments on our recent article, "Evaluation of post-operative skeletal stability after sagittal split ramus osteotomy and contralateral intraoral vertical ramus osteotomy in asymmetric mandibular setback"[1]. We appreciate the opportunity to further clarify our findings and to discuss important considerations regarding postoperative skeletal stability and fixation materials.

The reader expressed concern regarding a mean posterior relapse of vertical reference line to B point (VRL-B): *P*=0.638; horizontal reference line to B point (HRL-B): *P*=0.191 mm at the B point during the one-year follow-up period. However, it should be noted that *P*-values are not measures of the magnitude of positional change, and no direct statistical analysis of relapse itself was performed in this study. We used the Wilcoxon signed-rank test for statistical analysis in this study, and a *P*-value greater than 0.05 indicates that there is no statistically significant difference in the position of point B between the measurement time points. VRL-B represents the anteroposterior position of point B, whereas HRL-B represents its vertical position. When comparing measurements taken immediately after surgery and at one year postoperatively, neither parameter showed a statistically significant difference (*P*-values: VRL-B=0.638, HRL-B=0.191). These findings indicate that there was no statistically significant positional change of point B between the immediate postoperative period and one year after surgery. Although the *P*-value for HRL-B did not reach statistical significance, its relatively lower value may reflect the influence of occlusal changes resulting from postoperative orthodontic treatment.

We agree with the reader that the choice of fixation material remains an important topic in orthognathic surgery. Resorbable fixation systems offer clear advantages, such as eliminating the need for removal surgery and reducing long-term complications associated with metallic implants. At the same time, concerns regarding their mechanical strength and potential for relapse have been discussed in the literature. However, the studies cited by the reader (Cheung et al.[2] and Ueki et al.[3]) do not report an increased risk of skeletal relapse with resorbable fixation, but rather demonstrate comparable skeletal stability between resorbable and titanium fixation systems. Our study contributes to this ongoing discussion by demonstrating that, in the context of combined sagittal split ramus osteotomy (SSRO) with contralateral intraoral vertical ramus osteotomy (IVRO), the use of resorbable fixation can achieve stable anteroposterior outcomes without significant relapse.

It is also important to note that postoperative skeletal stability is influenced by multiple factors, including surgical technique, the magnitude and direction of mandibular movement, muscular adaptation, and individual anatomical variability. In our study, the combined surgical approach was designed to minimize bony interference and optimize condylar positioning, which may have contributed to the observed stability despite the use of unilateral resorbable fixation.

We fully agree with the reader's suggestion that further well-designed prospective and randomized controlled studies are necessary to directly compare long-term outcomes between resorbable and titanium fixation systems, particularly in cases involving significant asymmetry.

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Once again, we thank the reader for their valuable comments, which have allowed us to clarify our findings and further emphasize the clinical implications of our study.

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Authors' Contributions

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Conflict of Interest

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

References

1. Kim SY, Park YW. Evaluation of post-operative skeletal stability after sagittal split ramus osteotomy and contralateral intraoral vertical ramus osteotomy in asymmetric mandibular setback. J Korean Assoc Oral Maxillofac Surg 2025;51:278-83. https://doi.org/10.5125/jkaoms.2025.51.5.278
2. Cheung LK, Chow LK, Chiu WK. A randomized controlled trial of resorbable versus titanium fixation for orthognathic surgery. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2004;98:386-97. https://doi.org/10.1016/j.tripleo.2004.02.069
3. Ueki K, Nakagawa K, Marukawa K, Takazakura D, Shimada M, Takatsuka S, et al. Changes in condylar long axis and skeletal stability after bilateral sagittal split ramus osteotomy with poly-L-lactic acid or titanium plate fixation. Int J Oral Maxillofac Surg 2005;34:627-34. https://doi.org/10.1016/j.ijom.2005.02.013

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