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STABILITY AFTER MAXILLARY ADVANCEMENT WITH CONVENTIONAL ORTHOGNATHIC SURGERY IN CLEFT MAXILLARY DEFORMITIES

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Purpose: To evaluate the long-term skeletal stability after maxillary surgical advancement with conventional Le Fort I osteotomy in patients with cleft lip and palate by a systematic review of the published data.

Methods: An electronic search of eight databases was performed. Studies were considered for inclusion if they assess the stability of maxillary surgical advancement with conventional Le Fort I osteotomy fixed with plates at the post-treatment follow-up 1 year or more postoperatively in patients with cleft lip and/or palate. Both prospective and retrospective studies, with more than 6 patients per intervention group, were included. Study selection, risk of bias assessment and data extraction were performed in duplicate.

Results: A total of 25 reports met the initial search criteria, and 10 reports were finally selected. The overall methodologic quality scores were high for only 1 randomized clinical trial. After maxillary advancement with Le Fort I in patients with cleft lip and palate, the long-term horizontal relapse at the A-point was 20% to 30% in 4 studies and 30% to 40% in 3 studies. In addition, vertical relapse was more than 50% in 4 studies. The study judged as a high-quality study reported a 37% rate of horizontal relapse and a 65% rate of vertical relapse at the A-point.

Conclusions: Current evidence suggests maxillary surgical advancement with conventional Le Fort I osteotomy in patients with cleft lip and palate appears to show a moderate relapse rate in the horizontal plane and a high relapse rate in the vertical plane.

Keywords: *Stability, Le Fort I osteotomy, Cleft lip and palate*

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