

Stability of Maxillary Advancement Via Distraction Osteogenesis In

Cleft Lip and Palate Patients: Report of Two Cases

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Introduction: Cleft lip and palate often results in midface hypoplasia and class III skeletal pattern. Maxillary hypoplasia resulting in skeletal class III malocclusion is high among patients with cleft lip and palate. Treatment is usually with Le Fort I advancement with/with out mandibular setback

However, the stability of maxillary advancement with Le Fort I surgery is unpredictable and is known for high percentage of relapse. Therefore, this article reports two cases of distraction osteogenesis of the maxilla to correct the skeletal discrepancies.

Method: 2 cases of cleft lip and palate patients with severe skeletal class III discrepancies were treated with maxillary advancement via Le Fort I osteotomy followed by distraction osteogenesis.

Results: The cephalometric measurements were re-recorded after 1 year to quantify relapse. No significant relapse noticed. Clinically, there were marked improvement in dentofacial structures and results were stable following review after 1 year.

Conclusion: This case report highlights the choice of treatment using distraction osteogenesis on the maxilla in two cleft lip and palate patients to correct skeletal discrepancy. Maxillary advancement via distraction osteogenesis seems to provide a significant structural improvement and stable results for patients with cleft lip and palate. Distraction osteogenesis is a useful method for bone regeneration and is a popular technique for treatment of craniofacial skeletal dysplasia, especially in patients with cleft lip and palate.