

FP05

Midfacial distraction in craniofacialsynostosis affected by obstructive sleep apnea syndrome: polysomnographic and cephalometric evaluation

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Introduction: We evaluated the correlation between the skeletal facial advancement through LeFort III osteotomy and the modification of polysomnographic values in syndromic patients with sleep respiratory disorders affected by craniofacialsynostosis.

Methods: We selected a sample of 17 patients affected by mild to severe OSAS. All patients underwent a Le Fort III osteotomy. In five cases we used the “classical technique” and in 12 cases distraction osteogenesis. Sleep respiratory disorders were evaluated by pre-op and post-op polysomnography. All patients had pre-op and post-op cephalometric records.

Results: The average midface advancement was 16 mm (10-28 mm) measured at A point. The average pre-op polysomnographic records were: ODI 28.6 (8-75), AHI 23.2 (8-50). The average post-op polysomnographic records were: ODI 3.88 (0,3-7), AHI 4.14 (0.2-3). In the tracheostomized patient we removed the tracheostomy and the patient with CPAP stopped the treatment.

Conclusions: The respiratory disorders in syndromic patients with midfacial hypoplasia have different clinical manifestation: from snoring to acute respiratory distress requiring tracheostomy. Our study demonstrates an improvement of polysomnographic values in all patients, with a shift from severe to mild OSAS or even a complete resolution.