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Myofunctional evaluation after surgery for tonsils hypertrophy and its correlation to breathing pattern: a 2-year-follow up.

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OBJECTIVES: To evaluate the myofunctional status in children submitted to adenoidectomy or adenotonsillectomy, correlating the pre and post-surgical patterns throughout a 24-month-period. To correlate the myofunctional alterations to the sort of surgery performed (adenoidectomy versus adenotonsillectomy) and to the predominant postsurgical breathing pattern (predominantly nasal versus allergic rhinitis). METHODS: Forty children were assessed by the otorhinolaryngologist and speech therapist before and 1-24 months after surgery. In order to evaluate myofunctional status, a pre-structured protocol was designed, which included observations regarding facial posture, tonicity, mastication, deglutition and respiration. A score from 0 (normal pattern) to 12 (highly altered) was set. RESULTS: There was a partial, but progressive decrease of the score after surgery (p < p0.001). This decrease was markedly observed during the first 6 months following surgical procedure (p < 0.001), after which it was no longer significant. There was no correlation between the myofunctional progress and the sort of surgery performed. The myofunctional improvement was more accentuated in nasal breathers when compared to those with allergic rhinitis. CONCLUSIONS: Improvement of myofunctional status seems to be observed in children after surgery. In this study, the improvement was predominantly accomplished during the first 6 months following surgical procedure. Persistent pattern of mouth breathing due to allergic rhinitis may difficult recovery of the myofunctional status. The most adequate post-surgical moment for the otorhinolaryngologist to refer the patient to speech therapist for myofunctional therapy seems to be crucial, as well as the recognition by the speech therapist of the persistence of the obstructive symptoms, re-referring this patient to the physician.

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