

## SPEECH RESONANCE AFTER SEPTOPLASTY IN A PATIENT WITH BILATERAL CLEFT LIP AND PALATE

MENDES MR, Freitas LT, Sampaio-Teixeira ACM, Araújo BMAM, Silva ASC, Yamashita RP

Laboratório de Fisiologia, Hospital de Reabilitação de Anomalias Craniofaciais - HRAC-USP, Bauru/SP

**PURPOSE:** The nasal airway is an important regulator of the pressures generated in speech when velopharyngeal function is altered. Patients with cleft palate often have nasal obstruction and increased nasal resistance, which can compensate a possible velopharyngeal dysfunction (VPD) and mask hypernasality. **CLINICAL REPORT:** A 16 year-old patient, male, underwent nasometric and rhinomanometric assessment before and one year after septoplasty and bilateral inferior turbinectomy surgery. Nasometry was used to evaluate the nasalance scores (acoustic correlate of nasality) during the reading of a set of 5 sentences containing predominantly nasal sounds (nasal text) and a set containing exclusively oral sounds (oral text). Rhinomanometry permits the determination of the minimum nasal cross-sectional area (CSA) by the simultaneous measurement of the differential transnasal pressure and nasal air flow during resting breathing. Before surgery, the nasalance values were 40% and 26% in nasal and oral text, respectively, indicating hyponasality. Rhinomanometry showed that the values obtained for nasal area were 0.571cm<sup>2</sup> and 0.094cm<sup>2</sup> in the right and left sides respectively indicating a reduced nasal CSA of the left side. After surgery, there was an increase in nasalance to 55% in the nasal text and to 40% in the oral text, indicating hypernasality. Rhinomanometry indicated that nasal area were 0.237cm<sup>2</sup> and 0.287cm<sup>2</sup>, in the right and left sides respectively. **CONCLUSION:** The surgery resulted in an increase of the nasal area and improving nasal patency. However, hypernasality was demonstrated. These results confirm what has already been reported by Warren et al (1992) in stating that in the presence of VPD "a good nose for breathing is often a bad nose for speech".