OP-38

Effect of PNAM with Nasal Stent on Infant Nasal Symmetry Correction of Complete Unilateral CLP Pre-Labioplasty: Three-dimensional Anthropometric Analysis

Gian Nur Alamsyah[1], Lisda Damayanti[1], Helmi Siti Aminah[2], An-Nissa Kusumadewi[1]
[1]Universitas Padjajaran
[2]Dr. Hasan Sadikin General Hospital
Bandung, Indonesia
Corresponding author: gian.alamsyah@unpad.ac.id

ABSTRACT

Introduction: Infants with complete cleft lip and palate (CLP) exhibit asymmetrical characteristic of nasal deformation. Pre-surgical treatment by making presurgical nasalveolar molding (PNAM) with a nasal stent aims to assist the sucking and swallowing function of infants with CLP as well as passively moving separated alveolar segments and correcting nasal deformities in order to obtain more functional and aesthetically satisfactory surgical results. **Objective**: This study aimed to analyze the effect of PNAM insertion with a nasal stent on the correction of nasal symmetry in infants with complete unilateral cleft lip and palate. **Methods**: This research is a quasi experimental with one-group pre-treatment and post-treatment design. Five unilateral complete CLP infants were subjected to anthropometric measurements of alar displacement, columella height, nostril width nostril height and nostril axis inclination to obtain anthropometric ratios on the cleft and non-cleft sides with three-dimensional surface scanning before (T1) and after (T2) insertion of PNAM with nasal stent. **Results**: Analysis of the students' t-test showed a significant (p-value <0.05) between T1 and T2 in four anthropometric-ratio. Insertion of PNAM with nasal stent has resulted symmetrical nasal morphology of infants with complete unilateral CLP pre labioplasty with an increased ratio of columella height, nostril width, nostril height and nostril axis inclination between the cleft and non-cleft sides. **Conclusion**: Installation of PNAM with nasal stent can correct pre-labioplasty nasal symmetry.

Keywords: presurgical nasalveolar molding, nasal stent, nasal deformity, nasal symmetry