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- A COMPARATIVE STUDY TO ASSESS THE OUTCOMES BETWEEN CLOSED TIP PRIMARY RHINOPLASTY WITH CONFORMERS VERSUS OPEN TIP PRIMARY RHINOPLASTY IN UNILATERAL COMPLETE CLEFT LIP AND PALATE PATIENTS

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ABSTRACT

BACKGROUND: Cleft lip and palate are the most common congenital deformities encountered in developing countries like India, with an overall prevalence of 1 in 700 live births worldwide (Ahmed et al., 2017). Even after the increasing prevalence of the deformity, the treatment of the nose is still challenging due to factors like large defects, soft-hard tissue deficiencies, age, and the socioeconomic condition of the patient.

AIMS AND OBJECTIVES: The study compares the outcomes of open-tip primary rhinoplasty without conformers versus closed-tip primary rhinoplasty with conformers and assesses the aesthetic outcome of the nose in patients undergoing primary open-tip rhinoplasty versus closed-tip rhinoplasty.

MATERIALS AND METHOD: The study included two groups of 20 patients. Group I patients were operated on using closed-tip rhinoplasty with nasal conformers; nasal conformers were left in situ for up to 1 month of period, and group II patients were operated on using open-tip rhinoplasty without nasal conformers. Patients were assessed both objectively and subjectively preoperatively and postoperatively at the 3rd and 6th-month follow-ups. The patient's cleft nasal defect was measured by anthropometric parameters, namely nostril height, nostril width, nasal tip projection, bialar width, and lip length, objectively, and the aesthetics of the nose was assessed subjectively using pre- and postoperative photographs of the patient at the 6th-month follow-up postoperatively by healthcare professionals and rated using criteria of the Ascher Mcdade scale and also by the patient party with a simple rating scale of good, moderate, and bad. The results were calculated and tabulated for further calculation of statistical significance.

RESULTS: Comparing the anthropometric values of both open-tip and closed-tip rhinoplasty techniques in cleft lip and palate patients we achieved similar results in both groups in terms

of nostril height, nostril width, columellar height, and lip length with a marginal superiority noted in the open-tip rhinoplasty group in terms of nasal tip projection.

INTERPRETATION: The achieved results are statistically significant and clinically acceptable, with no adverse effects on the patient's nasal growth. The findings of this study can be utilized as a future reference and guidance for an objective examination of the nose. To examine both qualitative and quantitative outcomes, a larger sample size and longer follow-up time are required.

CONCLUSION: Despite the limited sample size and short follow-up period, the study found no significant difference between the two groups. Closed-tip rhinoplasty fulfills the aesthetic and functional demands in terms of outcomes following surgery. Open rhinoplasty surgery outcomes rely on the experience and expectation of the surgeon and will however provide stable results with less relapse and marginally better outcomes compared to closed-tip rhinoplasty

KEYWORDS: closed tip rhinoplasty, open tip rhinoplasty, unilateral cleft lip and palate, primary rhinoplasties.

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