A Single Stage Cleft Rhinoplasty Technique for Primary Unilateral Cleft Lip and Palate 'The Gujrat Technique'

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Abstract: Without an early intervention to correct the unilateral complete cleft lip and palate deformity, nasal architecture can progress to an exaggerated cleft nose deformity. We present the results of a modified unilateral cleft rhinoplasty procedure ‘the Gujrat technique’ to correct this deformity. Ninety pediatric and adult patients with non-syndromic unilateral cleft lip underwent primary and secondary composite cleft rhinoplasty using the Gujrat technique as a single stage operation over a 10-year period. The technique involved an open rhinoplasty with Tennison lip repair, and employed a combination of three autologous cartilage grafts, seven cartilage-molding sutures and a prolene mesh graft for alar base support. Post-operative evaluation of nasal symmetry was undertaken using the validated computer program ‘SymNose’. Functional outcome and patient satisfaction were assessed using the NOSE scale and ROE (rhinoplasty outcome evaluation) questionnaires. The single group study design used the non-parametric matching pairs Wilcoxon Sign test (p < 0.001), and showed overall good to excellent functional and aesthetic outcomes, including nasal projection and tip definition, and higher scores of the digital SymNose grading system. Objective assessment of the Gujrat cleft rhinoplasty technique demonstrates its aesthetic appeal and functional versatility. Overall it is a simple and reproducible technique, with no significant complications.

Keywords: cleft lip and palate, congenital rhinoplasty, nasal deformity, secondary rhinoplasty

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