

Palatal configuration in Complete Bilateral Cleft Lip and Palate Infants before and after Cheiloplasty

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The Purpose of this study was to analyze the early changes in the three dimensional configuration of the premaxilla, vomer and lateral segments following one and two stage cheiloplasty in bilateral lip and palate(BCLP) infant. This study consisted of 10 complete BCLP infants. One stage operations were performed in five patients according to Manchester's method at four months of age. Two stage operations were done for the remaining five patients using a triangular flap according to Tennison's method, at four and eight months of age. Serial plaster models before and after cheiloplasty were obtained and measured by our self-developing system (Mishima, et al, Cleft Palate Journal 33:245-251,1996) Consequently, the following differences in palatal configuration between the one and two stage cheiloplasties were observed: (1)In the two stage group, the premaxilla shifted towards the cleft edge where the cheiloplasty was performed in both first and second stage operations. After the second stage operation, the premaxilla did not shift greatly, however, protrusion of the premaxilla remained. In two cases, the premaxilla shifted downwards and towards the cleft edge of the lateral segments where the first operation was performed. (2)In the one stage group, the one stage group, the premaxilla descended downwards and backwards with twisting or bending in 4 cases, and remained one case descended straight. (3)Patients in the two stage group had a stronger tendency towards medial collapse of the lateral segments than those in the one stage group.