

Effect of Nasoalveolar Molding in Infants with Cleft Lip & Palate

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Background & Aim: In the 19th century McNeil (prosthodontist) used an oral prosthesis to approximate the cleft alveolar segments and thus initiating the concept of modern presurgical infant orthopedics. More recently (1994) Barry Grayson developed a new technique that not only it approximates the alveolar segments but it also reshapes the nose in order to perform primary nose surgery, this technique is called Nasoalveolar molding (NAM).

The aim of presenting this is to demonstrate the sequence of alveolar and nasal changes following the use of nasoalveolar molding.

Materials & Methods: Patients with nonsyndromic complete unilateral cleft lip and palate. Nasoalveolar molding was performed for each patient and treatment time took 8-12 weeks. A serial of standard basilar view 1:1 photographs were taken for each patient. Each patient was photographed at the initial visit and after the nasoalveolar molding.

Digital caliper was used to measure the cleft size on the study model at the initial visit and after nasoalveolar molding.

Results: Patients expressed good improvement. The cleft size was reduced significantly. Improved both the columella deviation and length as well as the nostril width and height in the cleft side.

Conclusion: NAM is an effective procedure in reducing the alveolar cleft size and it also improves the nasal architecture. This will facilitate the work of the plastic surgeon during the lip adhesion and primary nose surgery and consequently with better aesthetic outcome.