

**“PRESURGICAL NASOALVEOLAR MOLDING IN
BILATERAL CLEFT LIP AND PALATE.”**

By:

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ABSTRACT

Background:

Presurgical nasoalveolar molding is a nonsurgical method of reshaping the alveolus, cleft lip, cleft palate and the nose prior to chieloplasty and palatoplasty, lessening the severity of the surgery. Difficulties encountered with the surgeries, for cleft lip and palate is very challenging. The presurgical nasoalveolar molding technique, proves to be an invaluable asset in the management of bilateral cleft lip and palate surgery.

Objectives:

The study was conducted to evaluate the efficacy of presurgical nasoalveolar molding in the management of bilateral cleft lip and palate in terms of,

- 1) To assess the reduction of cleft size in cleft lip, palate, and alveolus.
- 2) To assess the change in position of the premaxilla and the alveolar segments.
- 3) To assess the improvement columella length.
- 4) To assess the changes in the position of the alar base and the cartilages.

Methods:

A prospective study was conducted, which included 8 patients with bilateral cleft lip and palate, under 1 month of age reporting to department of oral and maxillofacial surgery, at Bhagwan Mahaveer Jain Hospital, Bangalore between November 2007- November 2009. These patients, were treated with presurgical nasoalveolar molding therapy, clinical parameters were assessed pre and post therapy, using the photographs and impressions of intraoral casts of areas of interest.

Results:

Results of the study showed reduction in the cleft size, premaxilla moved posteriorly to appreciable limits, columella length was increased, and gave a contour to alar base and also increased its width.

Conclusion:

The presurgical nasoalveolar molding technique is an exciting adjunct to our surgical armamentarium in dealing with the challenge of primary closure of bilateral cleft lip and palate patients. Satisfactory results were obtained using this technique.

The advantages of this method included, simplicity of the procedure and in improving the surgical results, particularly in obtaining tension free muscle closure of bilateral clefts.