



**PRESURGICAL NASOALVEOLAR MOLDING FOR CORRECTION OF  
UNILATERAL CLEFT LIP NASAL DEFORMITY**

By

**Dr. N.Nikhil**

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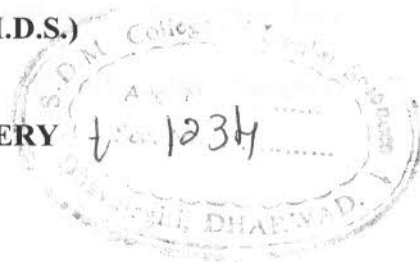
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Under the guidance of

**Dr. K. Gopalkrishnan**

**Professor & Head**

**DEPARTMENT OF ORAL & MAXILLOFACIAL SURGERY  
S.D.M. COLLEGE OF DENTAL SCIENCES & HOSPITAL, DHARWAD**

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**ABSTRACT:**

**AIMS OF THE STUDY:**

To study the effects of modified presurgical nasolabial molding in correcting the nasal deformity and alveolar malposition in infants with complete unilateral cleft lip, alveolus and palate.

**OBJECTIVES OF THE STUDY:**

1. To assess the reduction of the cleft gap in cleft lip, alveolus and palate
2. To assess the improvement in columella length
3. To assess the changes in the position alar bases and cartilages
4. To observe improved long term nasal esthetics

**Materials and methods:**

A prospective study was carried out on 20 patients who reported to the Craniofacial Surgery and Research Center, S.D.M College of Dental Sciences and Hospital, Dharwad with unilateral cleft lip alveolus and palate. These infants were divided into 2 groups – study group (receiving NAM therapy) and control group (without NAM therapy) consisting of 10 infants each. Pre treatment and post treatment clinical, cast and photographic anthropometric measurements of the individuals of the study group were compared with that of the control group ( measurements made at the time of presentation and at the time of surgery).

### **Results:**

The results of this short term prospective study showed an increase in the nasal tip projection ( $p=0.00$ ) and the columella on the cleft side( $p=0.00$ ) while reducing the alveolar cleft gap( $p=0.04$ ) and linear discrepancy( $p=0.00$ ) between the cleft alveolar segments contributing to improved nasal contour and more symmetrical alveolar arch form prior to surgery in the case group. Photographically a significant decrease in the cleft side nasal width ( $p=0.00$ ) and bi-alar width (0.01) was noted prior to surgery when compared to the control group.

### **Conclusion:**

This controlled clinical trial, through the analysis of 5 clinical soft tissue measurements and 3 intra-oral measurements shows that the early presurgical treatment in the form of nasoalveolar molding was capable of reducing the severity of the cleft deformity while improving columellar deviation and reducing the inter alveolar gap and maintaining long term nasal symmetry in infants with unilateral cleft lip, alveolus and palate.