

# "LONG TERM OUTCOME OF GROWTH IN PATIENTS OPERATED WITH LIP ADHESION AND WITHOUT LIP ADHESION IN BILATERAL CLEFT LIP AND PALATE PATIENTS."

By

### DR. SAURAV BHADURI

Dissertation submitted to the

Rajiv Gandhi University of Health Sciences, Bangalore, Karnataka

In partial fulfillment

Of the requirements for the degree of

College of Dental

MASTER OF DENTAL SURGERY (M.D.S.)

In

ORAL AND MAXILLOFACIAL SURGERY

Under the guidance of

DR. ANIL DESAI

PROFESSOR AND HEAD



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

SDMCDSLRC

T-01255

**DHARWAD** 

2017-2020

# **ABSTRACT**

### **Aims and Objectives**

To compare and evaluate the long-term facial growth and aesthetics in bilateral cleft lip and palate patients treated with lip adhesion followed by lip repair and single stage closure.

#### Patients and methods

A prospective study on 90 patients operated by a single surgeon for bilateral cleft lip and palate who reported to SDM Craniofacial unit for follow-up, between the ages of 9 to 14, was carried out from October 2017 to June 2019. The sample was divided into three groups i.e. lip adhesion group, single stage group and aged matched control group.

The craniofacial growth of all the patients in the sample was assessed using objective and subjective methods which include: a) Clinical evaluation by an independent evaluator b) Lateral and frontal cephalograms to assess the linear and angular measurements c) Facial anthropometric analysis d) Study models.

The results were then checked for significance and variance using parametric and non parametric tests.

#### Results

Statistically significant differences were found in the growth patterns of the lip adhesion and single stage. The maxilla as found to be shorter and rotated downwards in the single stage group while significant differences were also noted in the upper facial height and bi-alar width between the two groups. The maxillary projection was found to be lesser and a pseudo class III profile was more common in the second group. Greater constriction of the upper arch especially in the anterior maxillary region was noted on the study models.

## Conclusion

Both surgical techniques had some amount of growth inhibition on the maxillary growth when compared to the control group, however this effect was more pronounced at the region of the maxillary base, which as shorter, tipped inferio-posteriorly in patients who underwent single stage closure. The nose which was flat with reduced nasal tip projection and wider columella. Lip adhesion significantly superior growth outcomes pertaining to the skeletal morphology, nasolabial soft tissues and upper dental arch compared to the single stage group. The growth was therefore comparatively closer to the normal pattern in patients undergoing definitive chieloplasty after lip adhesion

Key words: Bilateral cleft lip and palate, Lip adhesion, growth, anthropometry