



OUR EXPERIENCE WITH WIDE BASED TRIANGULAR FLAP TECHNIQUE IN CLEFT LIP REPAIR

KEYWORDS

Unilateral cleft of the lip, Bilateral cleft of the lip, Wide based Triangular technique,

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ABSTRACT *Cleft lip repair by the standard triangular flap technique gives a prominent, visible zig-zag scar on the cleft side of the upper lip which is cosmetically less acceptable to the public. By taking a simple modification of widening of the base of the triangle, the scar looks very thin, less conspicuous, mimic like a near normal philtral column and well accepted by the patients.*

INTRODUCTION:

Clefts of the Lip & Palate are the most common congenital facial clefts. Of these Unilateral Cleft Lip is the commonest. Cleft of Lip may occur alone as in G-I Cleft, (or) together with Alveolus as in G-I A cleft.(or) with Clefts of a Palate as in Group III Clefts.

The aim of surgical repair of the cleft lip is not only closing the cleft of the lip but also to achieve a normal looking and Normal functioning lip.

GOAL OF CLEFT LIP REPAIR: To bring back the structures into the normal anatomy, there by achieving cosmeses and restoration of function.

OBJECTIVES OF REPAIR OF CLEFT LIP ARE:

Symmetry- the end result of a cleft lip repair should include a symmetrical lip with normally placed philtral ridge & dimple.

Natural appearance of the Cupid's bow with preservation of white role & a full vermilion with a prominent tubercle.

The nose should be brought into more acceptable symmetry, by restoring the nostril floor & lengthening the calumella.

Inconspicuous scar
No growth disturbances

Ever since the first description of repair of cleft lip was documented, many procedures have been evolved. Each procedure claiming the superior to the predestined in achieving perfection. However time was proved, all these techniques falling short of ideal in some aspect (or) other. Thus today we have different surgeons following different techniques, popular techniques are

Millard rotation advancement flap technique.
Triangular flap technique.
Staight line technique.
Quadrangular flap technique of LeMesurier.

The triangular flap technique with wide base has got few characteristics. To construct a triangular flap on the lateral cleft segment, which will rotate & interdigitate with the medial cleft segment, to lengthen the cleft side of the lip

and to form the normal cupid's bow.

Principle of wide based triangular flap repair is

To reconstruct the normal shape of the Cupid's bow.
A small zig zag suture line to minimize vertical scar contracture.
Realignment of the orbicularis oris muscle in transverse position.
Construction of floor of the nose.
Elimination of soft tissue undermining.
Design simplification.

Standardization of the procedure, by specific diagram and precise measurements in designing the flaps, and minimal tissue loss.

AIM OF STUDY: To Evaluate the quality of repair & versatility of Triangular flap technique with wide base in various clefts in different hands

MATERIAL & METHODS: 135 cases of clefts of the lip belonging to G-I. G-IA, & G-III clefts, which are underwent surgery between January 2007-2015 January in Govt. General Hospital, Kurnool have been observed for the type of surgery, our department have been following the triangular flap technique for the repair of cleft lip we analyzed the results of the past 9yrs to evaluate the equality of repair & versatility of triangular flap method. Total clefts repaid 135 cases, G-I: Unilateral clefts – 45, G-I: Bilateral clefts – 35, G-III: unilateral-30 G-III: Bilateral clefts – 25. The results analyzed by observing the

Appearance of the lip
Muscular alignment
Symmetry
Appearance of Cupid's bow
Nature of the scar
Nasal correction
Subsequent secondary problems.

OBSERVATIONS: Most of the surgeries were performed by the triangular flap method

The effective results of the technique observed are

Simplicity: by use of precise measurements in designing of the flap. It is easy to understand and learn the procedure.

Applicability: It is applicable to all types of the clefts like unilateral, bilateral, complete or incomplete. It is also suitable for all age groups of patients.

Reliability: The results are reliable even in the hands of the junior plastic surgeons.

Safety: complications following the procedures are low, and there is minimal loss of the tissue.

Reversibility: It is easily revisable.

Scar is thin and inconspicuous, mimic like a phyltral column and more acceptable to the patients.

CONCLUSIONS: Wide based Triangular flap repair is an excellent technique both senior and junior practitioners.

The technique gives thin and inconspicuous scar with near normal filtral column on cleft side.

Case Photographs
Case-1



Image showing Preoperative photo a 3 months old baby



Image showing postoperative scar, 2yrs after surgery-Case-2



Image showing Preoperative photo a 4 months old baby



Image showing postoperative scar, 1yr after surgery Case-3



Image showing Preoperative photo a 5 months old baby



Image showing postoperative scar, 3 yrs after surgery
Case-4



Image showing postoperative scar, 3 yrs after surgery



Image showing Preoperative photo a 5 months old baby

REFERENCE

- 1. Text book of plastic surgery cleft crafts. | 2. Text book of plastic surgery McCarthy. |