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# RECONSTRUCTION OF UPPER AND LOWER LIP DEFECTS

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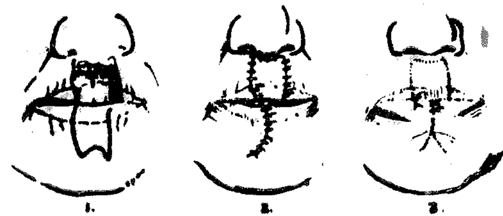
Defects of the lip are due to congenital malformation, to injuries and burns, or to the excision of tumours are varied in type and each type require individual consideration. Age and sex are important factors since patient in older age have looser soft tissue, permitting use advancement, transposition or rotation flap to greater advantage than in younger patient.

For smaller defect, wedge execision of lesion and approximation moderate sized median defect of upper lip may be repaired by direct advancement of remaining portion of lip. For large median defect a quadri lateral flap is transposed from each side to correct the deformity.

Gillios and Millard (1957) used a modified quadri lateral flap called fan flap.

In upper lip moderate defects of 1/3rd to 2/3rd sized, Abbey's (1898) operation is of choice. A prong shaped full thickness flap is taken from the mediam portion of the lower lip and left attached to pedicle near vermilion border, the labial artery lying close to the labila mucosa provide adequate blood supply. The flap is moved upwards to fit into the defect of the upper lip and exactly sutured in position. The detachment of pedicle is done after 14 days..

ABBE'S FLAP FOR RECONSTRUCTION OF CENTRAL PORTION OF UPPER LIP




1. PRONG SHAPE ABBE FLAP PREPARED.
2. FLAP AFTER TRANSPOSITION.
3. AFTER DIVISION OF PEDICLE IN A 2nd STAGE.

Fig. No. 1.

**Reconstruction of lateral defect of upper lip :**

Small lateral defect of upper lip, the nasolabial flap give good results. Estlander (1872) operation also based on labial artery is useful in moderate size defect of upper or lower lip near the corner of the mouth and consist of rotation of Tringular flap from the side of lip to cover a defect. Correction of rounded angle of mouth is necessary as a secondary procedure.

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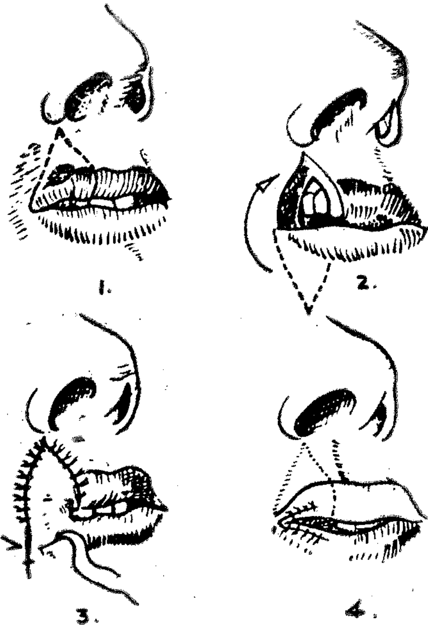
ESTLANDER OPERATION




1. TRIANGULAR PEICE OF UPPER LIP REQUIRING EXCISION FOR MALIGNANCY.

2-3. ESTLANDER FLAP FROM LOWER LIP MOVE TO RECONSTRUCT PART OF UPPER LIP.

4. CORRECTION OF ROUNDED CORNER AS A SECONDARY PROCEDURE.

**Fig. No. 2.**

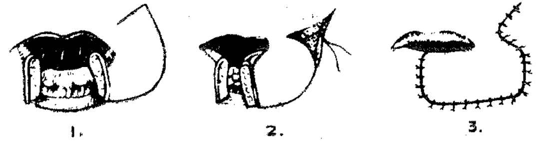
**Reconstruction when defect is morethan half of lip:**

Fan flap is used when defect is of morethan 1/2 of the lip. Neoplasms of lower lip are more common.

A fan shaped flap based on labial vessel of normal lip corresponding to defect is planned. Full thickness of lip flap is rotated until red margin meets red margin of lip.. This reduces the size of mouth opening.

Bilateral fan flap can be used to repair defect of entire lower lip. Secondary stage is required to correct the angle of mouth.

FAN FLAP OPERATION




1. 2/3 OF LOWER LIP EXCISED AND FAN FLAP MARKED.
2. FAN FLAP MOVED.
3. AFTER COMPLETE REPAIR.

**Fig. No. 3.**

**Observation:**

The 30 cases were admitted in S.M.S. Medical College hospital in the last 6 years in the department of plastic surgery in which lip reconstruction was done. The male female ratio was 2 : 1.

Disease--wise largest group was of squamous cell carcinoma 13 (43.3%), the lower lip was involved in all these cases. Second group was of trauma, 8 (26.6%) in which 5 were of lower lip and 3 of upper lip. In this group 6 cases were of road side accidents and 2 cases were of human bite. In the bening group cases where of cavernous haemangioma two bilateral cleft lip (post operative tight lip), 4 cases. Cancrum oris was the cause in all three cases of infective group, in one case upper lip was involved and in other two lower lip.

Ratio of lower and upper lip in this study was 11 : 4.

**Table 1**

*Disease Incidence*

| S. No. | Disease | Number Upper lip | Number Lower lip | Total No. | Percentage |
|---|---|---|---|---|---|
| 1. | Traumatic Lesion | 3 | 5 | 8 | 26 66% |
| 2. | Benign lesion | 4 | 2 | 6 | 20 00% |
| 3. | Carcinoma lip | — | 13 | 13 | 43.33% |
| 4. | Infective | 1 | 2 | 3 | 10.00% |

**Table 2**

*Lesion and the Operation*

| S. No. | Disease | Direct repair etc. Upper Lower Total | Abbey's | Estlander | Fan Flap |
|---|---|---|---|---|---|
| 1. | Traumatic lesion | 4 | 1 | 3 | — |
| 2. | Benign Lesion | 1 | 3 | 2 | — |
| 3. | Malignancy | 1 | — | — | 12 |
| 4. | Infective Lesion | — | — | 3 | — |
| | Total & Percentage | 6<br>20% | 4<br>13.3% | 8<br>26% | 12<br>40% |

In this series fan flap operation was done in 12 (40%) cases. All cases were of squamous coll carcinoma of the lower lip. Excision of growth resulted into a defect which was between 1/2 to 2/3rd of the lip. The Estlander operation was done in 8 ( 26.66% ) of which 3 were of cancrum or is and 3 were due to the traumatic loss of lower lip, the remaining 2 were of cavernous haemangioma of lower lip. The direct repair was done in 6 cases (20%) of which 4 were due to tranmatic loss of lip ( Three in lower lip), one was of squamous cell carcinoma in a very early stage. The abbey's flap operation was done in 4 cases, who had tight lip after repair of bilateral cleft lip.

**Summary**

Our study of 30 cases of reconstruction of lip is reported. Various methods used by us for reconstruction are described.

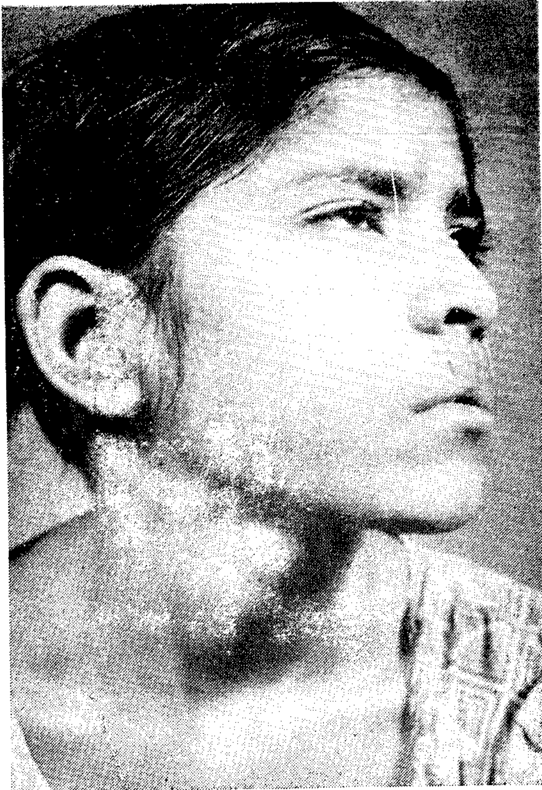


Fig. No. 4 A. Showing tight upper lip afier lip repair.

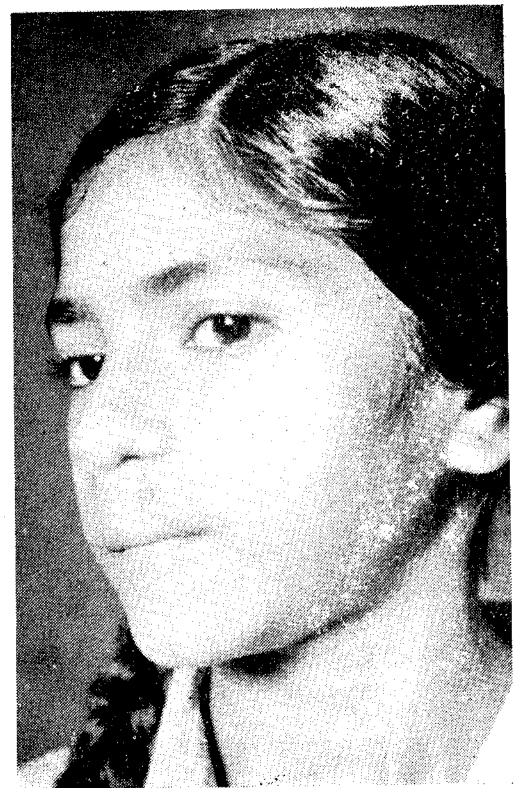


Fig. No. 4 B. Post operative view of same patient after Abbey's flap repair.

Fig. 5 A. A case of cancrum oris showing defect of upper lip & part of cheet.

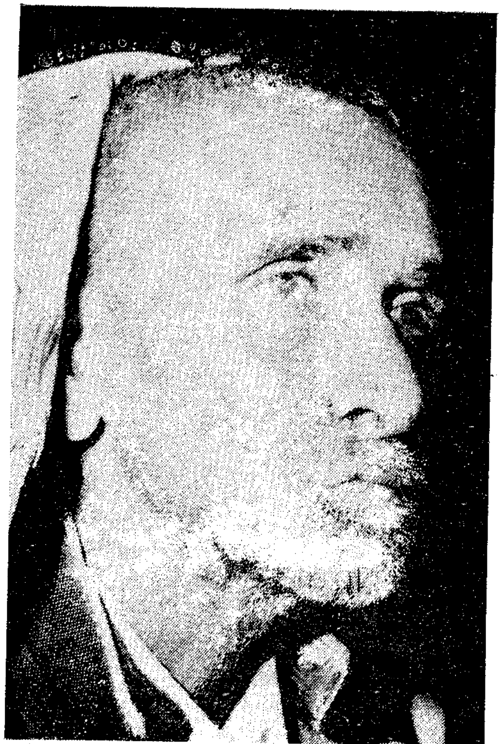


Fig. No. 5 B. Postoperative view after repair by Esilander flap.

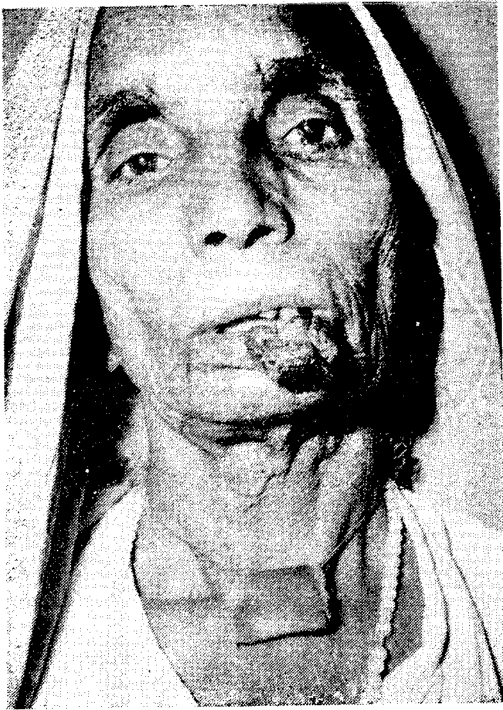


Fig. No. 6 A. showing squamous cell carcinoma involving nearly 1/2 lower lip

Fig. No. 6 B. 2/3 of Lower lip excised and Fan flap marked.

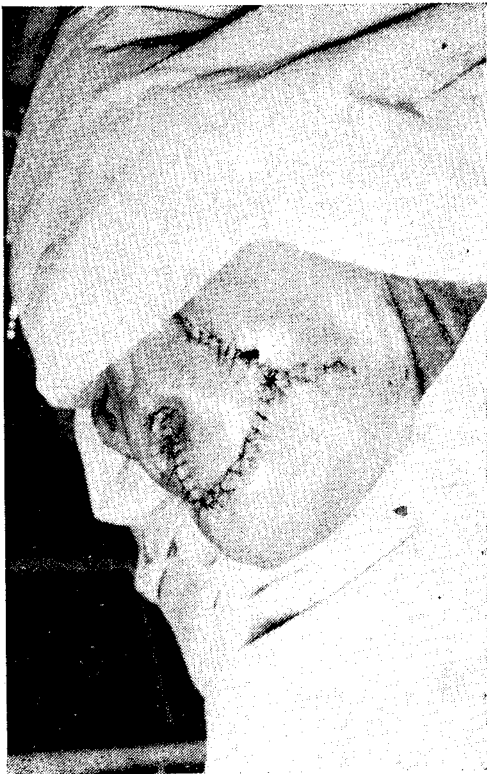


Fig. No. 6 C. Picture showing reconstructed lower lip at end of operation.

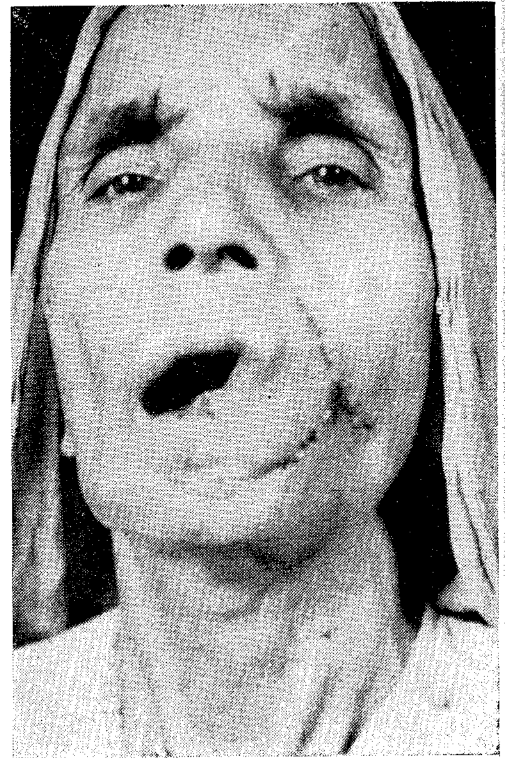


Fig. No. 6 D. Postoperative of same patient.

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