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UPPER LIP RECONSTRUCTION WITH A FOREHEAD FLAP

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SUMMARY

The use of a midline forehead flap for reconstructing the columella, nostril floor and the upper lip in a case of basal cell carcinoma is being presented.

(*Key Words* : Reconstructive surgery, Forehead flap, Basal cell ca. lip, Lip cancers, Epidermoid ca. lip)

Lip cancer constitutes 10% of total cancers of head and neck and it is the lower lip which is commonly affected (Brewer, 1923; Blair, 1941) Epidermoid variety being the commonest. The reconstruction in a case of basal cell carcinoma of the upper lip with extended forehead flap is being presented.

Case Report

Patient H. K., 55 years, was having an ulcerated progressive lesion in the upper lip for one year (Fig. 1). It had developed infection on its surface for the last six months. On examination the lesion was 3 cm × 2 cm, irregular, ulcerated and was present in the philtral area. Superiorly it extended upto the columellar base and the nostril floor. There was no evidence of secondaries anywhere. Biopsy proved it to be basal cell carcinoma.

Growth with 2 cm healthy edge alongwith base of columella, nostril floor and nasal spine were resected leaving a large central defect. A flap based on both supratrochlear vessels (6 cm wide, 13 cm long) was raised (as shown in Fig. 2 and Fig. 4). Donor area was closed by scalp flap rotation. The tip of flap was stitched to the floor of the nostril, then it was turned over itself and its lateral edges were stitched to the two layers of the lateral lip defects. After 3 weeks the flap was severed and the pedicle was returned to the donor area (Fig. 3). The flap was insetted to make the columella and the nostril floors.

Problems of the hairs growing in some part of the flap forming the lining was overcome by thining and excision of hair follicles. Patient was asked to get the reconstruction of the vermilion done at a later stage.

Discussion

For full thickness defects of upper lip of more than one third size, different procedures are available viz Estlander's flap but it is suited for commissural defects. Abbe's modification can substitute for other lip defects but it has its own restrictions like tissue availability and mutilation of lower lip (Fogh-Anderson 1948; Blair, 1950). Dieffenback-Webster technique involves extensive perioral cheek dissection. Local flaps are good for early lesions only (Converse, 1977).

Forehead flap had edge over acromiopectoral, arm and cervical flaps because of its better circulatory efficiency and convenience in positioning.

Easy execution, edge to edge closure, simultaneous provision of lining and cover and above all columella and nostril floor reconstruction were possible in one sitting. Safety of this unusually long flap depended on inclusion of both supratrochlear vessels.

Conclusion

The midline forehead flap, having both the supratrochlear vessels in it has got extremely good vascularity and can be conveniently used for reconstructive surgery in cancer of the head and neck.

Fig. 1. Clinical photograph of the patient before operation showing ulcerated lesion of the upper lip.

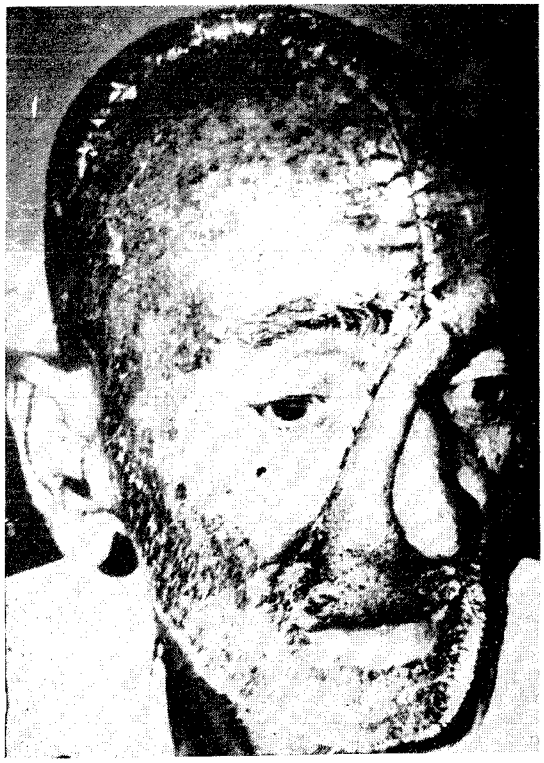

Fig. 2. Primary reconstruction of the defect using supratrochlear based flap. Donor area has been closed by scalp flap rotation.

Fig. 3. Profile of the patient 6 months after surgery.

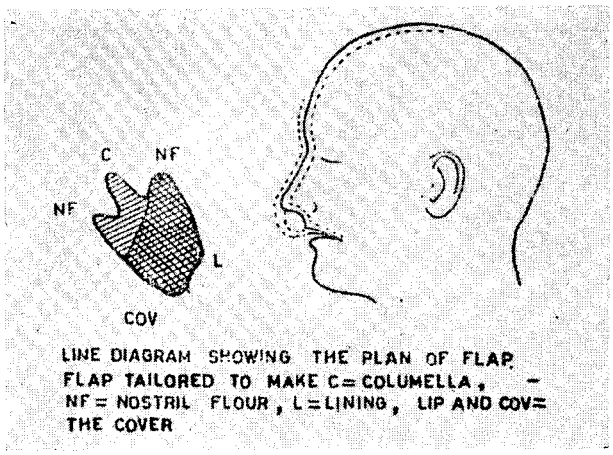

Fig. 4. Line diagram showing the plan of flap.

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