

STERNOMASTOID MYOCUTANEOUS FLAP FOR RECONSTRUCTION OF TONGUE

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SUMMARY

A bulky, fungating tongue histologically reported as benign was treated with sub-total glossectomy 10 years earlier and replaced by bilateral sternomastoid myocutaneous flaps. The case has had numerous multicentric lesions. The surgical procedures carried out have been reviewed.

Loss of tongue leads to cosmetic and functional disability. Filling up the space itself improves function considerably and has been achieved by a Pterygoideus medialis sling (Washio, 1973). Mutilic et al. (1978) used only the muscle (sternomastoid), the cover being provided by fore-head skin. They could demonstrate function on E.M.G. but the movement was from the surviving tongue, the muscle only moved passively.

Five cases were reconstructed with bilateral sternomastoid island flaps (Parkash et al., 1980), from the unit including this case. This case has an additional interest that he did not have a frankly malignant lesion at any stage but had multicentric and local recurrence.

Material and Methods

A 60 year old male was first seen in December 1974 with a 2.5 cm lesion on the left side of the tongue including the apex. An excisional biopsy revealed a non-malignant lesion. Patient presented himself again in September, 1979 with a large indurated fungating mass of 7 months duration replacing the tongue, with difficulty in closing the mouth because of the large lesion (Fig. 1). The lymph nodes were palpable but soft and mobile. Biopsy revealed pseudo-epitheliomatous hyperplasia. Whole of the tongue except a small fringe of the posterior

most part of the tongue was excised, including a supra hyoid block.

Bilateral 6×4 cms sternomastoid island flaps were inserted and stitched to each other and to the tongue remnant and fringe of oral mucosa. The donor site was closed primarily, aided by positioning both arms post-operatively (Parkash et al., 1982). The lymph node and the tongue lesions were confirmed to be benign.

E.M.G. six months later showed no activity on rest, or on protruding the tongue. The patient had a large median lesion on the lower lip in 1982, and a small ulcer on the alveolus (Fig. 2 & 3). This was excised and reconstructed by a modified bilateral Estlander-Gillie-type of flaps. The alveolar lesion was fulgurated. The cosmetic result with the mouth closed was good but the lip tended to droop on opening the mouth (without dentures) (Fig. 4).

He was admitted again in 1984 with a small ulcer in the region of the tongue. This was excised and the area covered with a mucosal flap. The report showed emboli in the lymphatics, suggestive of malignancy. Two months later, repeat biopsy however was suggestive of a benign lesion. In view of the earlier report, radiotherapy in continuation with methotrexate was decided on. Patient did not attend for further treatment.

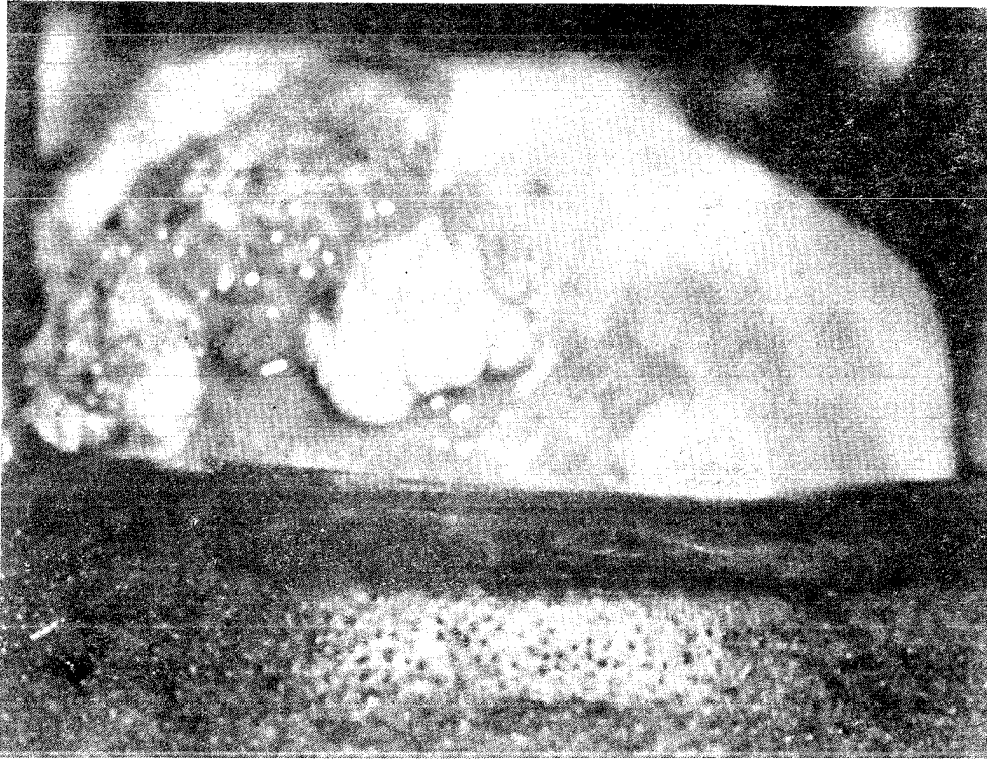


Fig. 1. Showing a large ulcerative lesion of the tongue with big leukoplakic patches.

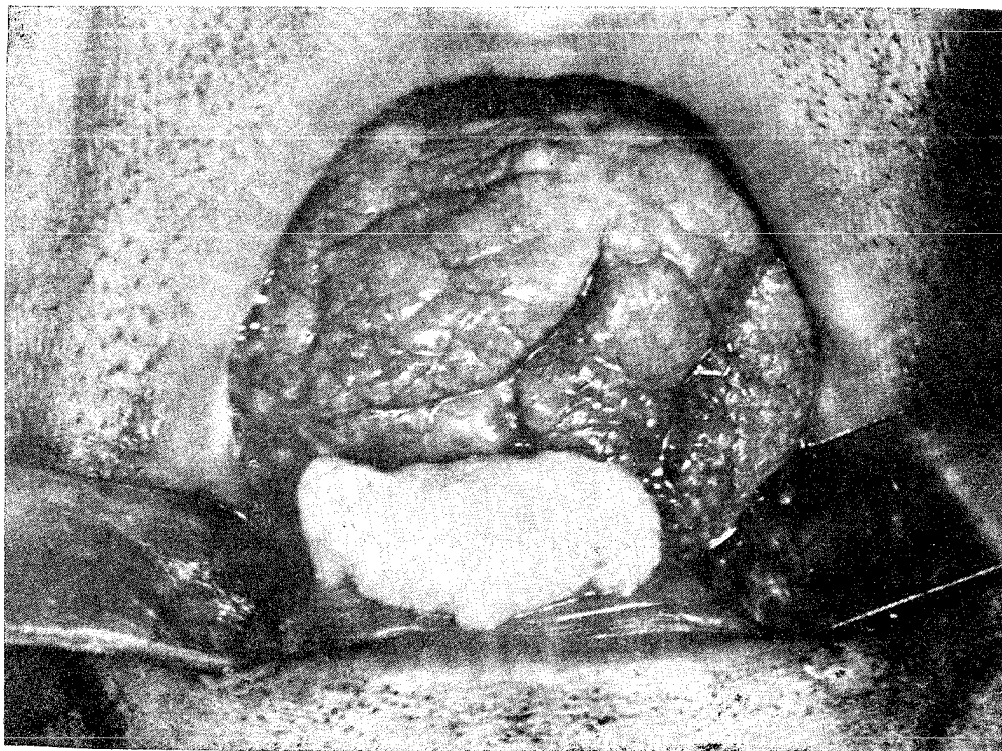


Fig. 2. Showing the reconstructed tongue with protrusion to level of lip. Note a fresh lesion of the lower lip.



Fig. 3. Showing the appearance after retraction of the tongue.

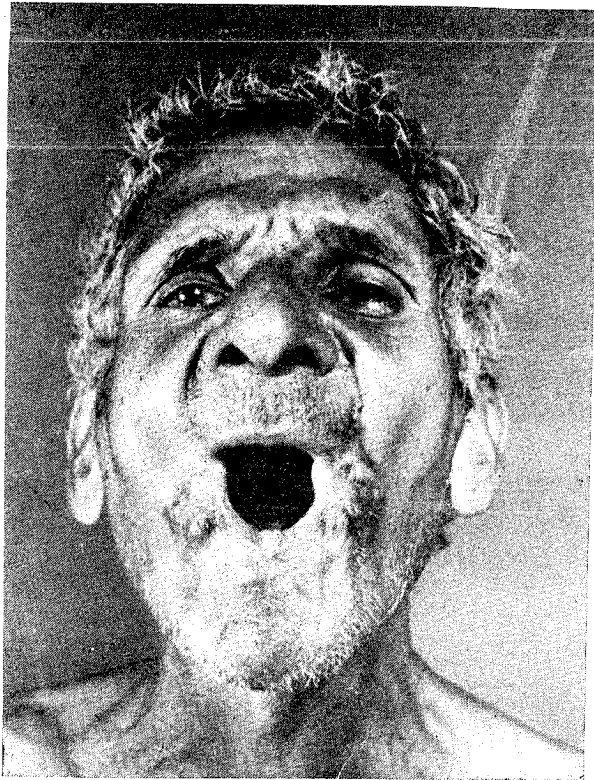


Fig. 4. Showing the post-operative result 2 months after bilateral Estlander.

Discussion and Conclusions

Sternomastoid island flaps are dependable and convenient. We used them to reconstruct the tongue in 5 cases but others could not be evaluated because of lack of follow up. Active protrusion is by the remnants of tongue even if there is a demonstrable function on E.M.G. (Mutilic et al., 1978).

Tumorous lesions are not uncommon and have been seen in the oral cavity, hand, foot and on the penis (Ananthakrishnan et al., 1981).

Apart from one occasion, where there was a strong suggestion of malignancy the growth appears to be benign. There were no secondaries even after 11 years.

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