

BUCCAL CARCINOMA - A CASE COMPARISON OF TWO MODALITIES OF RECONSTRUCTION

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ABSTRACT

Buccal carcinoma, though a rare disorder in this part of the world, is often advanced at the time of diagnosis requiring full thickness resection of the cheek resulting in a through and through full thickness defect of the cheek. Such a defect confronts Head & Neck Surgeons with problem of reconstruction. The author presents, compares and contrasts two modalities of reconstruction.

Keywords: Advanced buccal carcinoma, full thickness defect, pectoralis major myocutaneous flap, cervicopectoral advancement flap

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INTRODUCTION

Advanced buccal carcinoma which has either invaded through or near the skin of the cheek calls for through and through full thickness resection of the cheek. The resulting defect confronts Head & Neck Surgeons with problem of reconstruction in the following areas viz provision of water-tight resurfacing of the buccal mucosal defect, provision of aesthetic coverage of the cheek skin defect and provision of bulk for the cheek.

Several modalities of reconstruction of a full thickness cheek defect have been described. These include forehead flap, deltopectoral flap, temporalis muscle flap, myocutaneous flap etc. The author compares and contrasts two cases utilizing two different modalities of reconstruction. The surgical techniques are described.

SURGICAL TECHNIQUE

Case 1

Madam P presented in 1989 with a T3 left buccal carcinoma which almost invaded the skin of the cheek and an ipsilateral enlarged submandibular lymph node. A through and through full thickness resection of the carcinoma with an ipsilateral radical neck dissection was carried out. Reconstruction was achieved by utilizing pectoralis major myocutaneous flap. The skin paddle of the myocutaneous flap was turned externally to provide skin coverage for the cheek defect, the buccal mucosal defect was resurfaced with split skin graft on the pectoralis major muscle. Fig 1 shows the reconstructed cheek two months post-operation.

Case 2

Mr A presented in 1990 with a T3 left buccal carcinoma which had invaded through the skin of the cheek and an ipsilateral enlarged submandibular lymph node (Fig 2). A full thickness resection of the carcinoma with ipsilateral radical neck dissection was carried out resulting in a 6 cm diameter cheek defect. A segmental mandibulectomy was also carried out in view of the proximity of the tumour to the mandible. Post-operative histology revealed that the mandible was free of tumour. In this case the author utilized pectoralis major myocutaneous flap with its skin paddle turned internally to repair the buccal mucosal defect and cervicopectoral advancement flap to repair the cheek skin defect. At the beginning of the operation, the skin of the cheek to be excised was outlined. The incision of

Fig 1 - Mdm P two months Post-operation



Fig 2 - Buccal Carcinoma invading through the skin of the cheek



the cervicopectoral advancement flap extended from the cheek posteriorly to the auricle. It then sloped inferiorly along the anterior border of the trapezius muscle and further along the lateral border of the pectoralis major muscle to its skin paddle (Fig 3 and 4).

The cervicopectoral advancement flap was then raised subplatysmally in the neck and superficial to the pectoralis major fascia in the chest (Fig 5). Excellent exposure was obtained for resection of the primary tumour, neck dissection

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Fig 3 - Cervicopectoral advancement flap

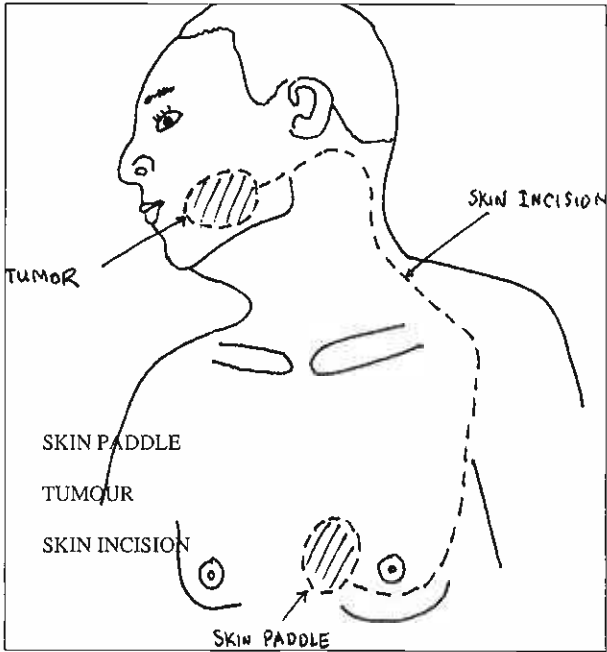
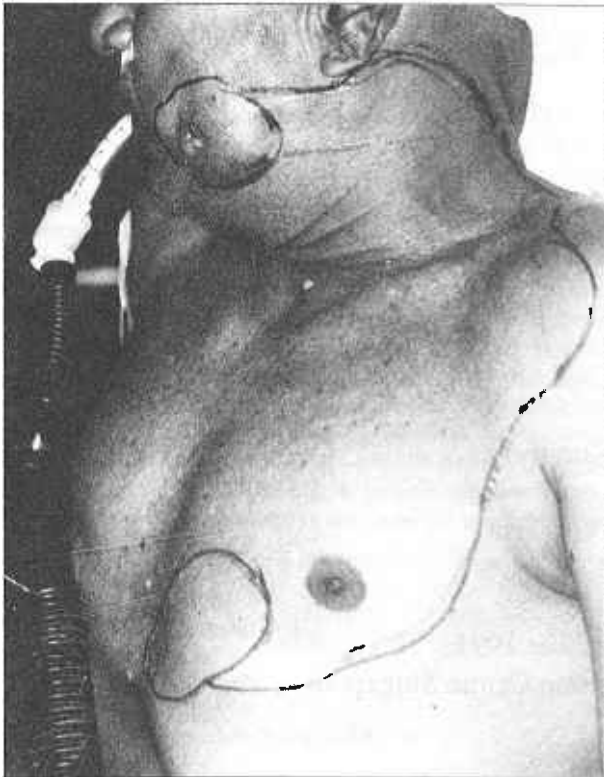


Fig 4 - Cervicopectoral advancement flap



and harvesting of pectoralis major myocutaneous flap. At the completion of the resection, the pectoralis major myocutaneous flap was turned internally to repair the buccal defect, the medially based cervicopectoral flap was then advanced anterosuperiorly to repair the cheek defect. The donor site was closed primarily. Fig 6 and 7 show the patient 2 months post-operation.

DISCUSSION

Of the several modalities of reconstruction available for a through and through full thickness defect of the cheek, the author feels that the two modalities presented in this paper are most promising.

Fig 5 - Raising of Cervicopectoral advancement flap

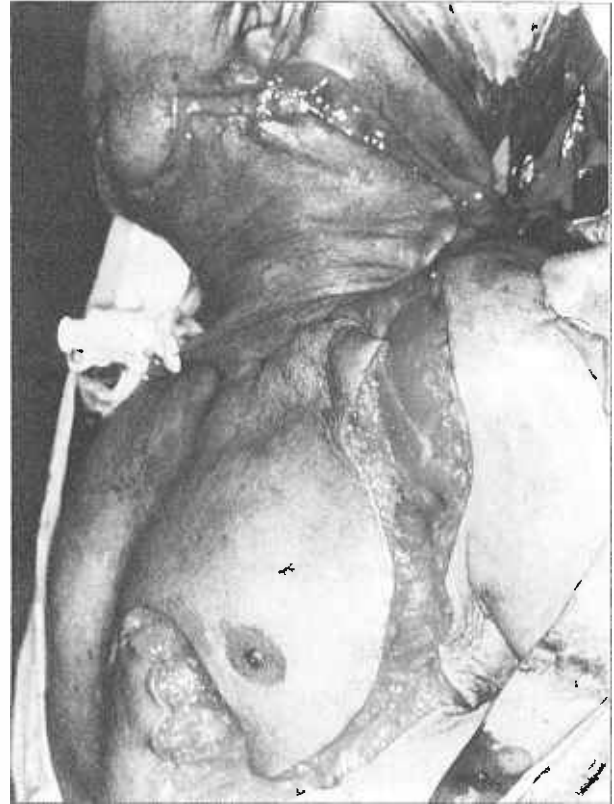


Fig 6 - Mr. A two months post-operation



Both modalities, viz pectoralis major myocutaneous flap in combination with split skin graft and cervicopectoral advancement flap in combination with pectoralis major myocutaneous flap have the following advantages:

1. Immediate one-stage reconstruction. Modalities such as forehead and deltopectoral flap require at least two stages of procedure.
2. Donor site can be closed primarily.
3. Provide excellent exposure for concurrent neck dissection and harvesting of pectoralis major myocutaneous flap.

Fig 7 - Mr. A two months post-operation



Besides the aforementioned advantages, cervicopectoral advancement flap offers an additional advantage, viz providing superior aesthetic result as can be seen by comparing Fig 1 and Fig 6. The skin defect of the cheek is replaced by skin from the submandibular area which provides good colour and texture match and additionally in patient with beard such as Mr A the beard bearing area of the cheek is replaced.

Utilizing the skin paddle of the pectoralis major myocutaneous flap for external coverage would result in an area of 'desert' on the replaced cheek.

The only disadvantage of cervicopectoral advancement flap is a tendency for a small area of the postero-superior tip to necrose. Becker advocates using intravenous fluorescein intra-operatively to detect any distal portion of the flap which does not fluoresce under ultraviolet light and trimming off such portion.

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