Conclusions: Mycutaneuous free flap transfer is a robust option in the repair of post-surgical skull base penetrating defects. Latissimus dorsi mycutaneuous free flap is a well-vascularised flap with homogenous thickness, various types of this flap can be harvested to cover any size and location of skull base defect.

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OP016

Island pectoralis major myocutaneous flap an Indian perspective A. Sagayaraj, Ravi P. Deo, Azeem Mohiyuddin, Oommen Modayil

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India has the highest incidence of oral cancer in the world. GB Sulcus cancers are the commonest among them. Tobacco chewing a habit prevalent in both sexes is the aetiology. Most are advanced at presentation needing radical surgery, primary reconstruction and post-op radiation. Pectorallis Major Myo Cuteneous (PMMC) flap was the only method of reconstruction in the past. However bulk, pedicle length, donor site deformity and inherent problems in females were distinct disadvantages. Hence with the advent of free micro vascular flap, PMMC went into disrepute. The superiority of a well conceived and executed free micro vascular transfer is unmatched but it has short comings, especially for cancer centres in the third world countries having large patient volume. Need of well developed plastic and reconstructive department, long learning curve, need for specific infrastructure, cost factor lastly the time constrains. In the absence of above, PMMC minus its drawbacks can still be a viable alternative for our poor patients seeking treatment at overcrowded centres.

To serve this purpose, we undertook a prospective feasibility trial of modifying a standard PMMC flap into a compact Island PMMC based on a thin long pedicle to circumvent the two main disadvantages; bulk and flap length especially in females. The study was under taken between 2009 and 2012. Thirty-four patients underwent this procedure, Ten among them were females, 32 patients underwent primary surgery the remaining underwent salvage procedure, 20 patients had Island PMMC for the inner lining while in five it was used to provide the skin cover. None developed major complications. The paper will highlight the indications, technique results and the overall advantage of this modification as an elective alternative to free tissue transplant under our circumstances.

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OP017

The Oxford experience with Buccinator and FAMM flaps for oral cavity and oropharyngeal reconstruction

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Purpose: The Buccinator and Facial Artery Musculo-Mucosal (FAMM) flaps can be used to reconstruct a wide range of intra-oral defects including floor of mouth, tonsillar fossa and lateral tongue.

We describe our experience with the Buccinator and FAMM flaps in the aforementioned areas and a novel use for the reconstruction of oropharyngeal tumours at the tongue base and lateral pharyngeal wall.

Materials and methods: We retrospectively reviewed all patients who underwent Buccinator and FAMM flap reconstruction examining indication, operative details, and post-operative outcomes. We describe our technique for its novel use in lateral pharynx/tongue base reconstruction through neck dissection access.

Results: There were no flap failures with all patients achieving primary healing with minimal complications. All donor sites closed directly with mouth opening at pre-operative status by 21 days post-op. Deeper flaps were adequately visualised and monitored using flexible nasoendoscopy.

Conclusion: In our experience Buccinator and FAMM musculomucosal flaps are an extremely versatile 'like for like' local flap option due to their long arc of rotation that we have used for the first time to successfully reconstruct the tongue base and lateral pharynx. As inset can be achieved via neck dissection access this avoids lip/ jaw split as per conventional oropharyngeal surgical management further minimising morbidity.

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OP018

Outcomes of submental artery island flap in oral reconstruction Bipin Varghese

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Background: Submental artery island flap (SMIF) described by Martin et al. is a reliable reconstructive option for oral defects. Thorough clearance of suprahyoid lymph nodes during its harvest yields gratifying aesthetic outcome with out any morbidity or oncological compromise.

Aims: Overall outcomes of SMIF in terms of aesthesis, function and disease free survival.

Methods and materials: Prospectively assembled data of 136 consecutive patients of SMIF reconstruction for oral cancer at Regional Cancer Centre, Trivandrum, India from October 2004 to December 2009 was analyzed for flap viability, aesthesis, function and locoregional recurrence.

Results: There were 78 men and 58 women of mean age \pm SD of 55 \pm 12 years. The primary site of tumour was tongue in 84%, floor of mouth or lower alveolus in 8%, buccal mucosa in 7% and lip in 1% of patients. Majority (83%) of the patients had a T1 or T2 cancers. Fifty-four (40%) patients had clinically palpable neck nodes preoperatively. Eighty-nine percent of patients had either a Selective or a Modified Radical Neck dissection, whereas remaining 11% had only level I clearance during the flap harvest. Twenty-five (18.3%) patients had pathologically positive neck nodal metastasis.

Seven flaps (5%) had partial necrosis which settled without any morbidity. After a median follow up of 40 months (Ranging from 4 months to 88 months), 27 patients (19.8%) recurred – 14 patients (10.2%) at primary site and 13 patients (9.5%) in the neck nodes. Twenty-four percentage of patients (13 of 54) with clinically positive neck node had recurrences, 6 at primary site, 6 at ipsilateral and 1 at the contralateral lymph nodes. Of the 15 patients with clinically positive neck node at level I, 5 recurred. Pre-operative clinical nodal staging was the only significant factor for recurrence on multivariate analysis (significance -0.0001).

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