



Loco regional flaps a boon for Surgeons in Head and Neck Reconstruction even in the Era of Microvascular flaps

Jeewan Ram Vishnoi¹ · Sanjeev Misra¹

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Oral cancer is one of the commonest cancers in India, owing to various risk factors related to the frequent use of wide variety of tobacco products [1]. Management of oral cancer revolves around the surgical treatment, and other modalities are usually considered as an adjunct to it. Surgical resection creates various kinds of defects, which generally require some form of reconstruction. The decision for types of reconstruction depends upon multiple factors including, site, size, thickness, body habitus, associated morbidities, availability of expertise, and expectations of the patient, etc. The goals of the reconstruction are to achieve good functional as well as aesthetic outcomes. Functional aims include oral competence, clarity of speech, mastication, mobility of the tongue, bolus transport, avoidance of nasal regurgitation, and aspiration. Whereas, aesthetic outcomes are a restoration of the bony framework, soft tissue contour, chin prominence, and mobility of the jaw. It is very challenging to attain all these aims of reconstruction in most of the patients [2].

Early-stage oral cancer confined to mucosa or submucosa leaves behind limited defects after surgical resection. Hence, these cases usually require inner lining reconstruction including the primary closure, split-thickness skin graft, local flaps like nasolabial, submental flaps, or free flaps like free radial forearm and anterolateral thigh flaps.

Whereas, those tumors close to or invading the mandible, need marginal or segmental mandibulectomy. When the tumor involves overlying skin of the face, it creates full-thickness defects necessitating complex reconstructive procedures. Earlier, local and regional flaps were the only options to reconstruct the complex defects of the oral

cavity. Nowadays, increased availability and expertise of microvascular surgeons have provided many options for the various forms of reconstruction. Those lesions which involve the segmental resection of the mandible are best treated with the free osteocutaneous flaps. The free fibular flap is the most preferred, but other options include radial forearm osteocutaneous, scapula, iliac crest, and rib with pectoralis major myocutaneous flap [3].

However, many patients usually are not suitable for reconstruction with the free flaps owing to various risks associated with them. Also, the expertise of microvascular surgeons is not available at all the centers and still inadequate to deal large burden of oral cancer patients in developing countries. These microvascular surgeries are time-consuming and have a long learning curve to achieve an acceptable success rate. It is therefore important for the surgeon to know about the various loco regional flaps. Therefore, in many high volume centers, pectoralis major myocutaneous flap is the most commonly performed flap for complex resection and reconstruction for a large proportion of the patients [4,5]. This issue carries articles on nasolabial flap and pectoralis major myocutaneous flap in head and neck cancer reconstruction. Other options include latissimus dorsi and trapezius flap. Some regional flaps like a deltopectoral flap and forehead flaps are considered as salvage flaps due to various inherent drawbacks. Those defects created on the palate or upper alveolus seldom require reconstruction because the dental prosthesis can cover it without tissue flap.

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✉ Sanjeev Misra
misralko@gmail.com

¹ Department of Surgical Oncology, All India Institute of Medical Sciences, Jodhpur, India

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