*Case Report*

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# Social Indication of Flap Reconstructive Surgery in Oral Cavity Cancer

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**Abstract**

Patients with advanced cancer experience a complex web of problems, all of which interact. Specialist palliative care services have developed to meet these needs, but their effectiveness should be considered. Though carcinoma of oral cavity is known for high rates of morbidity and mortality, it is an obligation of a plastic surgeon to help the patient to have a dignified and normal social life for their remaining lifespan. Sometimes, the social impact of cheek defect in the form of neglect by family members and society compelled the reconstructive surgery in this patient. This article highlights social indication of a flap surgery in carcinoma of oral cavity.

**Keywords**: Carcinoma Oral Cavity; Metastasis; Social Impact.

## Introduction

Cancers of the oral cavity may involve single or more than one tissue of the region. Tissues in this region include bone, teeth, muscle, nerves, a rich supply blood vessels, numerous salivary gland, and the specialized lining called mucosa. Although tumors may arise in any of these types of tissues, they are most commonly related to changes in the lining of the oral cavity.The most common cancer of the oral cavity is squamous cell carcinoma which arises from the lining of the oral cavity. Over 95 percent of oral cavity cancers are squamous cell carcinomas and these cancers are further subdivided by how closely they resemble normal lining cells: well differentiated, moderately differentiated and poorly differentiated. Other types of cancers of the oral cavity include cancers of the salivary glands such as mucoepidermoid carcinoma, adenoid cystic carcinoma, sarcomas (tumors arising from bone, cartilage, fat, fibrous tissue or muscle), and melanomas. The other factors relate to poor prognosis and poor surgical outcome are deep invasion of the tumor, invasion of nerves, invasion of the lymph vessels, invasion of blood vessels and the presence of multiple separate cancers in the area.In general, Stage I and Stage II cancers require one type of treatment, either surgery or radiation therapy, to successfully control the cancer. Advanced Stage III and Stage IV cancers will often require combinations of surgery, radiation therapy and chemotherapy or even the use of all three.Overall survival rates for any cancer of the oral cavity are about 70 percent five-year survival for stage I or II disease. Five-year survival drops to about 50 percent for stage III cancers and further drops to roughly 35 percent for stage IV cancers.[1]Flap reconstructive surgery is usually done in cases where disease has not metastasized as part of curative reconstruction. This article highlights the importance of flap surgery even in those cases where disease has metastasized and flap surgery done for social reasons.

## Case Summary

This study was conducted in the Department of Plastic Surgery, JIPMER, Pondicherry, India. The case being reported was a 40 year old female with carcinoma of cheek who underwent wide local excision and reconstruction in the form of free microvascular Anterolateral Thigh (ALT) flap in a private centre. Postoperatively in view of necrosis of ALT flap, Pectoralis Major Myocutaneous (PMMC)

flap was done as a salvage measure. But in the post-operative period PMMC flap also got necrosed and was referred to higher centre (JIPMER) for further management. At the time of presentation to JIPMER, patient was diagnosed as stage IV carcinoma oral cavity with flap failure, with infected full thickness defect in the left cheek with distant metastasis (figure 1). Institution's tumor board consultation was taken and palliative chemotherapy was instituted. Reconstructive flap surgery was not advised in view of metastasis and high morbidity as patient was not fit for general anesthesia due to anemia, hyporoteinemia. Patient was advised to wear check prosthesis. Patient refused for prosthesis and requested for flap reconstructive surgery due to socially non-acceptance by family members because of cheek defect. At the patient's request on social ground flap surgery (Deltopectoral flap) was planned. Patient was prepared for anesthesia by blood transfusions. Hypoproteinemia was corrected by amino acid and albumin transfusion. Wound was prepared by repeated debridement and collagen sheet dressing. Once wound bed and patient was fit for reconstruction, Deltopectoral Flap surgery was done (Figure 2). Donor site of the flap was covered with split thickness skin graft harvested from the thigh. Postoperatively period was uneventful (Figure 3). Patient was discharged at postoperative day 7 and followed up at regular intervals.

**Fig. 1:** Carcinoma oral cavity with full thickness defect left cheek

**Fig. 2:** Deltopectoral flap skin graft on donor site of flap

**Fig. 3:** Postoperative period with DP flap.

## Discussion

Oral cancer is of significant public health importance to India. Firstly, it is detected at later stages which result in low treatment outcomes and significant costs to the patients whom typically cannot afford this type of treatment. Secondly, rural areas in

middle- and low-income countries also have insufficient access to trained providers and limited health services. As a result, delay has also been largely associated with advanced stages of oral cancer. Earlier detection of oral cancer offers the best chance for long term survival and has the potential to improve treatment outcomes and make healthcare affordable. Thirdly, oral cancer affects those from the lower socioeconomic groups, due to a higher exposure to risk factors such as the use of tobacco. Lastly, even though clinical diagnosis occurs on examination of the oral cavity and tongue which is accessible by current diagnostic tools, the majority of cases present to a healthcare facility at later stages of cancer subtypes, thereby reducing chances of survival due to delays in diagnosis.

The major goal of cancer therapy is to not only eradicate the disease but also restore patients to a reasonably normal quality of life. Delayed reporting and late-stage presentation of patients are extremely common phenomena in the developing world. Several factors like lack of awareness, financial restrictions, fear of surgery, inaccessible primary care and social belief plays a significant role in delayed reporting. Paucity of approach to the treatment leads to poorer prognostic scenario of the patient with large tumor and distant metastatic lesions. Methodology of rehabilitation is influenced by size-location of the defect and the prognostic scenario of the patient. Ideally, these defects should be surgically reconstructed. However, when surgical reconstruction is contraindicated or failed, prosthetic rehabilitation must be initiated. Palliative care for the patient in advance stages of malignancy with poor prognosis should focus on alleviating both the physical and psychological pain [4]. In carcinoma of oral cavity with stage IV disease with distant metastasis curative reconstructive flap surgery is not desirable. In our case study, reconstructive flap surgery was performed on social ground and allowed patient to live in the society and acceptance by the family members. Hence in such cases, on social ground reconstructive flap surgery is acceptable and justified.

## Conclusion

Even though reconstructive surgery is rarely performed in advanced malignancy of oral cavity, bearing the social compulsion in mind reconstructive surgery can improve the social and psychological well being of patients.

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