



## CASE SERIES ON CUTANEOUS METASTASIS IN OROPHARYNGEAL SQUAMOUS CELL CARCINOMA

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**ABSTRACT** The oropharynx is an increasingly common site for developing upper aero digestive tract malignancies. Histopathologically, most of these (~90%) are squamous cell carcinoma (SCC). The disease occurs in males more often. Tobacco chewing, alcohol consumption, smoking and HPV infection are all well-known pre-disposing factors. While the major route of spread is lymphatic, distant spread via blood has been reported, albeit rarely. The major sites of distant metastasis are lung, liver and bone. Cutaneous metastasis from oropharyngeal cancer are very rare (~1%) and require active investigation as the prognosis with such cases is quite grim. Here we present a series of 3 cases with skin metastasis from oropharyngeal cancer, developing much later following therapy, and the subsequent course of events.

**KEYWORDS :** oropharynx, squamous cell carcinoma, cutaneous metastasis

### INTRODUCTION

Head and neck carcinoma are growing increasingly frequent in India. Oropharyngeal cancers account for 10% of these constituting a significant cause of morbidity and mortality. With advances in multimodal therapy and its increasing availability, loco-regional treatment of disease has been giving positive results. Even so, management of distant metastasis and survival of patients with the same has not improved.

The most common sites of distant metastasis are liver, lung and bone. Cutaneous metastasis is rare and accounts for an incidence of 0.7 to 2.4%.

Treating doctors should be wary of cutaneous metastases as they carry a grim prognosis and should be accounted for while planning subsequent management.

### CASE REPORTS

#### Case 1:

A 52-year-old Male, chronic tobacco chewer and alcoholic, presented with foreign body sensation while swallowing which was diagnosed subsequently on clinical examination and imaging as a case of Carcinoma Oropharynx (Right side of base of tongue) staged as T2N0M0 whose biopsy showed it to be of squamous cell origin. The patient then received concurrent chemoradiotherapy in the form of 3 cycles of Cisplatin and 30 days of External Beam Radio Therapy. Patient could not receive further chemotherapy cycles owing to the onset of chemotherapy induced nephropathy



**Figure 1: Single inframammary metastatic nodule**

After 6 months the patient presented with a painful swelling in the left anterior chest wall 3 – 5 cm below and lateral to the nipple, FNAC of which showed it to be metastasis from squamous cell carcinoma.

Patient is currently on symptomatic treatment and is clinically stable

#### Case 2:

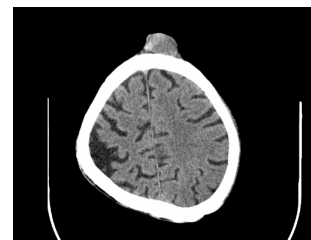
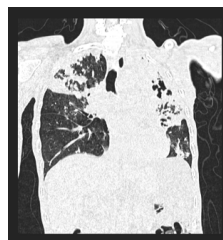
A 60-year-old male, diagnosed as a case of Carcinoma Supraglottis T2N2bM0 in November 2015 whose biopsy subsequently showed it to be Squamous Cell Carcinoma grade 3.



**Figure 2: Scalp nodules**

He received 30 days of External Beam Radiotherapy in November 2015, but roughly 7 months after completion of radiotherapy presented with multiple swellings on the scalp, weight loss and decreased appetite. On general examination, the patient was pale and appeared to be in withdrawal. He appeared to be free of loco regional disease. Local examination of the scalp however revealed a firm, indurated swelling on the scalp on the left side of the frontal region ~3x3x2cm, non-mobile, infiltrating the skin and possessing irregular margins. FNAC of the swellings showed them to be metastasis from Squamous Cell Carcinoma. A CT scan of brain showed this to be a soft tissue swelling with evidence of erosion of the underlying bone.

The patient was also having significant respiratory distress, which on further evaluation was shown to be due to extensive infiltration of his lungs by suspected metastatic infiltration.



The patient was started on palliative treatment, but passed away 3 days after presentation.

**Case 3:**

A 50 year old male, known tobacco chewer and chronic smoker presented with difficulty in swallowing since 2 months. On examination he had an ulcerative growth involving the right tonsillar pillar, uvula and soft palate with induration extending up to the base of the tongue. He was diagnosed as a case of Carcinoma oropharynx T3N2bM0 and was started on concurrent cisplatin based chemotherapy and external beam radiotherapy in May, 2017. He completed 30 days of radiotherapy and 6 cycles of chemotherapy following which there was resolution of the primary lesion. 2 months later, patient presented with a swelling in the left scapular region.

Fine needle aspiration cytology showed metastasis from poorly differentiated squamous cell carcinoma. The patient is currently receiving palliative care.

**DISCUSSION**

The incidence of cutaneous metastases coming from all types of internal malignant cancers accounts for 0.7 – 9%. (Spencer et al, 1987) Head and neck malignancies are indeed known to metastasize, but usually do so to the lung, liver or bone. Cutaneous metastasis is rare and accounts for an incidence of <1%. Rastogi *et al.*, had reported a case of multiple cutaneous metastasis in squamous carcinoma of the BOT at 18 months' follow-up. There is also report of cutaneous metastasis in squamous carcinoma of the tongue that occurred at the long term follow-up. The cases that we present here presented relatively sooner. Also, the patients had relatively good loco regional control of disease with chemoradiotherapy, as primary lesions were markedly reduced in size at follow-up.

Metastasis in squamous cell cancers of the oropharynx could be via to local spread, lymphatic or hematogenous route. In these cases, the skin metastasis is likely to be due to hematogenous spread. The presence of multiple skin metastases may occur in conjunction with lung and bone metastasis, as seen in case 2.

Cutaneous metastasis may be defined as an isolated or multiple intradermal collection of tumor cells remote from the primary or loco-regional disease. (Yoskovitch A et al, 2001) These can be single or many, and are seen in neck, scalp, face, lips, chest, back, areolae, arms, digits. They may also be dermal or subdermal. The location is mostly above the level of the umbilicus, with those below conferring a poorer prognosis than usual. (Schwartz RA, 1995)

The management offered to these patients was by and large palliative care. Case 1 received the immunomodulatory gefitinib and has been maintaining adequately well on the same. Some case reports have attempted palliative chemotherapy, but prognosis and response was not altered much. (Rahman T et al, 2015) Prognosis of patients with cutaneous metastasis from head and neck squamous cell cancers is considered to be poor with a survival time of only a few months. (Longo R et al, 2007)

The ideal method of managing cutaneous metastasis is inconclusive. There is a study which shows that surgical excision can improve survival rate. (Schwartz RA, 1995) But this should not be considered as the standard and should be used only in selective cases where the cutaneous metastasis is only present without any other. (Kotwall C et al, 1987)

Inevitably, majority of cases receive palliative care, and despite what was the state of primary post treatment and what form of therapy is offered, cutaneous metastases confer a universally bleak outcome which is why treating surgeons should be wary of the same due to the grim outlook it would foretell for the patients under their care. This report was brought forward in view of the rarity of the same and so as to highlight the above fact.

**CONCLUSION**

FNAC should be done in cutaneous nodules associated with oropharyngeal cancers to rule out metastasis. Confirmation of cutaneous metastasis generally implies a poor prognosis and general outcome for the patient.

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