# Cutaneous Metastasis from Squamous Carcinoma of the Base of Tongue

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#### Abstract

**Context:** Cutaneous metastasis from head and neck cancer is uncommon and it is seen from laryngeal cancer. Cutaneous metastasis from the base of tongue is relatively rare. **Case Report:** A 55-year-old male, who was a treated case of squamous carcinoma of the base of tongue presented with metastatic nodule on the skin of face and thigh. But, there was complete resolution of the tumor at the primary site. In the present case, clinically obvious cutaneous nodules with metastasis appeared soon after the completion of treatment with concurrent chemo-radiotherapy. The metastasis to the skin of face clinically appeared like an inflammatory lesion. Fine needle aspiration cytology confirmed the diagnosis of metastasis to skin at both the sites. **Conclusion:** Our case has highlighted that there could be associated occult skin metastasis at the time of diagnosis in squamous carcinoma of the base of tongue.

Keywords: Base of tongue, cutaneous, head and neck cancers, metastasis

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### Introduction

Cutaneous metastasis from head and neck cancers are uncommon. The incidence of cutaneous metastasis from head and neck cancers is less than 1%.<sup>[1]</sup> Cutaneous metastasis from head and neck cancers can be single and discrete or it may present as multiple nodules at different anatomic sites. Of head and neck cancer, laryngeal cancer is most often seen to be associated with cutaneous metastasis.<sup>[2]</sup> In cutaneous metastasis from the head and neck region, metastasis to the facial skin is uncommon.<sup>[3]</sup> We report here a treated case of squamous carcinoma of the base of tongue (BOT) presenting with metastatic nodule on the skin of face and thigh with complete resolution of the tumor at primary site.

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### **Case Presentation**

A 55-year-old male, chronic tobacco chewer presented to our institute with history of occasional throat pain and hoarseness of 4 months duration, which was subsequently diagnosed as squamous carcinoma of the BOT with bilateral secondary neck node (T3N2cM0, stage IV). The patient was treated by concurrent external beam radiotherapy (EBRT) of 70 Gy/35# and weekly chemotherapy with carboplatin (150 mg). The patient tolerated EBRT and chemotherapy well. At the 3 months follow-up from the completion of treatment, the patient presented with a progressive growing nodule on the left side of the face and thigh of 2 month's duration [Figure 1]. On local examination, there was 4 cm × 4 cm firm, mobile, slightly tender and inflamed sub-cutaneous nodule on the skin of left zygomatic region. The skin nodule on the left thigh was ulcerated, hard, fixed and tender. The thigh swelling was of 5 cm  $\times$  5 cm in its maximum dimension. Computed tomogram (CT) scan of the head and neck showed nodular mass in the premaxillary infra-zygomatic region [Figure 2]. Endoscopic examination showed post EBRT changes at the BOT without any evidence of an ulcer or growth. Fine needle aspiration cytology (FNAC) from the infra-zygomatic

nodule and thigh lesion revealed metastatic squamous carcinoma [Figure 3]. The final staging this time was T0N0M1 (Stage IV). The patient was planned and treated by palliative chemotherapy with methotrexate 50 mg and 5-FU 500 mg three times weekly. There was no response after four cycles. So, the patient was not willing to receive



Figure 1: Picture showing the sub cutaneous nodule at the left infrazygomatic region and a slough covered and ulcerated cutaneous nodule on the thigh

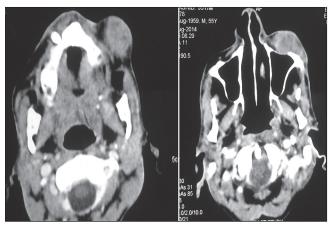


Figure 2: CT scan image showing a heterogeneously enhanced soft tissue mass of 48 mm  $\times$  35 mm in the left infra-zygomatic region

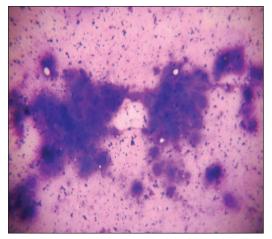


Figure 3: Photomicrograph with MGG stain (40X) showing clusters of neoplastic cells with irregular hyperchromatic nuclei and variable amount of cytoplasm suggestive of metastatic squamous carcinoma

chemotherapy anymore. At 4 months from the date of diagnosis of metastasis the patient was alive.

#### Discussion

In head and neck cancers common site for distant metastasis is the lungs.<sup>[4]</sup> Rastogi et al., had reported a case of multiple cutaneous metastasis in squamous carcinoma of the BOT at 18 months follow-up.<sup>[5]</sup> There is also report of cutaneous metastasis in squamous carcinoma of the tongue, that occurred at the long term follow-up.<sup>[6]</sup> However, in the present case the lesions of cutaneous metastasis appeared after 1 month following the completion of the treatment. This suggests that there was occult skin metastasis at the time of diagnosis or during the course of the treatment. Furthermore, the response to the primary lesion at the BOT with concurrent chemo-radiotherapy was complete. In the present case the infra-zygomatic nodule mimicked an inflammatory sub-cutaneous lesion due to the presence of inflammation and absence of typical hard consistency on palpation. But, clinically the presentation of the thigh nodule resembled that of a malignant lesion. Metastasis in epidermoid cancers of the head and neck could be due to local spread, lymphatic or hematogenous route.<sup>[7]</sup> In the present case the skin metastasis is likely to be due to the hematogenous spread. The presence of multiple skin metastases may occur in conjunction with lung and bone metastasis as well.<sup>[8]</sup> However, in the present case there was no radiologic evidence of lung metastasis.

The treatment offered in general to patients with cutaneous metastasis from head and neck primaries is palliative.<sup>[9]</sup> Our patient was treated with four cycles of palliative chemotherapy. Prognosis of patients with cutaneous metastasis from head and neck cancers is considered to be poor with a survival time of only a few months.<sup>[6]</sup> In the present case there was no response to the palliative chemotherapy and the patient was alive at the 4 months follow-up. Our report cannot comment on the long term follow-up results or on survival in patients who receive palliative chemotherapy.

# Conclusion

Skin metastasis from squamous carcinoma of the BOT is rare at a short span of time following the completion of treatment. This case has highlighted the probable presence of occult skin metastasis at the time of diagnosis, which became apparent after the completion of treatment. FNAC should be done in cutaneous nodules associated with head and neck cancers to rule out malignancy, even if it clinically appears to be benign in nature.

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