

# Cutaneous metastasis from carcinoma of the tongue

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## ABSTRACT

Carcinoma of the tongue accounts for 35% of squamous cell carcinomas of the oral cavity. Metastases to regional lymph nodes are common and subclinical nodal metastases may be found in up to 30% of T<sub>1</sub> and T<sub>2</sub> oral tongue carcinoma. For distant metastases, it normally metastasises to the lung, bones and liver. We report a case of a 34-year-old lady who initially presented with a T<sub>2</sub>N<sub>1</sub>M<sub>0</sub> carcinoma of the tongue that was treated by surgery and chemotherapy. After 1.5 years, she developed multiple metastatic skin lesions.

**Keywords:** Tongue, carcinoma, cutaneous metastasis, head and neck cancer

## INTRODUCTION

Patients suffering from a squamous cell carcinoma (SCC) of the head and neck region with distant metastases generally have a very poor prognosis.<sup>1</sup> Distant metastases normally manifest in the lung, bone and liver.<sup>2</sup> Only few articles have reported about different regions of distant metastases.

## CASE REPORT

A 32 year-old lady with no known medical illness, presented with ulcer over the left lateral border of the tongue of 6 months duration. She also complained of a left neck swelling of two weeks.

Examination of the oral cavity revealed an ulcerative lesion over the left lateral border of the tongue, medially crossing the midline, extending posteriorly near the base of the tongue and inferiorly involving the mucosa layer of the floor of the mouth. There was one discrete node at left Level III, measuring 1 x 1cm. Histopathology examination of the biopsy taken from the ulcerative lesion showed moderately differentiated SCC. All the investigations including full blood count, liver function test, renal function test and chest radiograph were well within normal limits. The patient was diagnosed as a case of carcinoma of tongue with the stage of T<sub>2</sub>N<sub>1</sub> M<sub>0</sub>.

The patient underwent a left partial glossectomy with a modified type III radical left neck dissection. She was later given three

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**Figs. 1:** a) An ulcerative mass over the back of the patient, b) a close up view of the ulcerated lesion and, c) mass in the scalp (arrow), also a metastasis from the carcinoma of the tongue.

cycles of chemotherapy consisting of 5-fluorouracil (5-FU) and cisplatin after the surgery. She tolerated the chemotherapy well and came for regular follow up. Two months after the chemotherapy, a Positron Emission Tomography (PET) scan showed no evidence of local or regional recurrence or distant metastasis.

She was disease free for about a year. After which, she started to develop multiple swellings over the scalp and the upper back. There was no pain or discharge. On examination, there was one swelling over the scalp (Figure 1c) that measured 4 x 4cm and two other swellings over the upper back measuring 5 x 5cm each. All the swellings were non tender and firm in nature. There was no sign of recurrence over the primary site and the nodal site. Fine needle aspiration cytology showed metastatic SCC and biopsy of the swelling showed metastatic undifferentiated carcinoma.

## DISCUSSION

Carcinoma of the tongue accounts for 35% of

SCC of the oral cavity.<sup>3</sup> The tumour may present as an ulcerative, exophytic or endophytic lesion. It often presents with a raised hard indurated edge. They are often associated with bleeding. Pain is not a usual presentation.<sup>3</sup> The most common site to be affected is the lateral surface. The lesion may be in continuity with the floor of mouth.<sup>3</sup> Carcinoma of the tongue has high risk of metastases to the lymph nodes.<sup>3</sup> Subclinical nodes are found in up to 30% of T1 and T2 tumours. Tumour thickness has been shown to be the most useful feature in predicting subclinical nodal metastases.<sup>3</sup> Those who are less than 3mm thickness have a five year survival of 85.7%. For thickness of between 4 and 7mm, the 5-year survival is 58.3% and thickness more than 7mm is 57%.<sup>3</sup> Patient with tumour more than 10mm thick have a 50% risk of nodal metastases.

Patients with SCC of the head and neck region with distant metastases generally have a very poor prognosis.<sup>1</sup> Distant metastases normally manifest in the lung, bone and liver.<sup>1</sup> It is very rare for metastases to mani-

fest in the skin from cancer in the head and neck region.<sup>4</sup> Although it is a general assumption that cutaneous metastasis indicates poor prognosis for the patient, information is lacking regarding the survival and the proper treatment in this group of patients. Berger *et al.* reported that in head and neck cancers, the survival was approximately three months after skin metastasis becomes clinically evident.

The overall incidence of cutaneous metastasis is 5.3%.<sup>5</sup> It most often occurs late in the course of disease, but also may be the presenting sign of underlying cancer.<sup>6</sup> Cutaneous metastasis arising from visceral malignancies have no specific appearance. These lesions are often described as either cutaneous or subcutaneous nodules with flesh-colored to pink or violaceous. Patients are often asymptomatic.<sup>6</sup> However, many reports of non-nodular metastases exist.<sup>6</sup> The most common tumour to metastasize to the skin is breast cancer. The chest is the most common site of cutaneous metastasis.

Skin metastasis occurs via haematogenous and lymphatic spread. There are several morphological types of skin metastasis.<sup>6</sup> Although the most common lesions are multiple or solitary infiltrating papules and/or nodules, there are also other variants which are rare such as alopecia neoplastica, zosteriform pattern, chest armour or the variants mimicking radiation dermatitis which have been reported rarely and they may be difficult to diagnose without histopathological study.<sup>6</sup> These variants have a poorer prognosis and are

due to the spread of the malignant cells along the subcutaneous lymphatics leading to blockade of the lymph ducts.

In view of the metastatic nature of the disease, the treatment of these patients is in general, palliative.<sup>7</sup> Whatever the nature of the primary lesion, even when taking into account treatment, the presence of skin metastasis is an indicator of poor prognosis. Most patients fare poorly and succumb rapidly to their disease.

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