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Case Report

# Multiple cutaneous metastases in a patient of carcinoma tonsil – Report of a rare case

Gunjesh Kumar Singh [a,1], Vikas Yadav [a,*], Pragya Singh [b,2], K.T. Bhowmik [a,3]

[a] Department of Radiotherapy, VMMC & Safdarjung Hospital, New Delhi 110029, India
[b] Department of Pathology, VMMC & Safdarjung Hospital, New Delhi 110029, India

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**Abstract** Carcinoma tonsil with visceral metastasis is a rare entity, and cutaneous metastasis is seen even more infrequently. We present a case of a 55-year-old male with carcinoma tonsil having received concurrent chemo radiotherapy, presenting with multiple cutaneous metastases to the scalp and thigh. To the best of our knowledge, till date only two similar cases of carcinoma tonsil with cutaneous metastasis have been reported in the English literature.



## Introduction

Carcinoma tonsil accounts for about 10% of all head and neck malignancies [1]. Usually the tumour spreads locally as well as through lymphatics to cervical lymph nodes. Hematogenous spread is quite uncommon with lung being the commonest site. Cutaneous metastasis associated with carcinoma tonsil is extremely rare with only two cases reported till date [2,3]. We report a rare case of carcinoma tonsil presenting with multiple cutaneous metastases to the scalp and left thigh.

## Case history

A 55 year old male, a chronic smoker, presented in our Department of Radiotherapy in April 2015 with chief complaints of difficulty in swallowing and throat pain since 3 months along with weight loss and reduced appetite. His general physical examination was unremarkable with Eastern Cooperative Oncology Group (ECOG) performance status 1. On local examination, there was an ulceroproliferative growth in the right tonsillar area measuring about 5 × 3 × 3 cm with involvement of anterior tonsillar pillar and the base of the tongue with single palpable cervical lymph node about 2 × 2 cm at right side level II. Biopsy from the right tonsillar growth showed features of moderately differentiated squamous cell carcinoma (Fig. 1a). All the baseline blood investigations were normal. Patient received radiotherapy to a dose of 66 Gy in 33 fractions over six and half weeks along with concurrent chemotherapy cisplatin.

After six months of treatment, patient presented with a history of multiple ulcers over scalp and thigh since 1 month (Fig. 2a and b). There were three ulcers over the scalp with the largest measuring 5 × 5 × 2 cm with everted and well

* Corresponding author. Mobile: +91 9811986657.
E-mail addresses: gunjeshsingh00764@gmail.com (G.K. Singh), drvikasyadav2012@gmail.com (V. Yadav), pragya986800@gmail.com (P. Singh), bhowkt@gmail.com (K.T. Bhowmik).
[1] Mobile: +91 8750546284.
[2] Mobile: +91 8750546210.
[3] Mobile: +91 9911582531.

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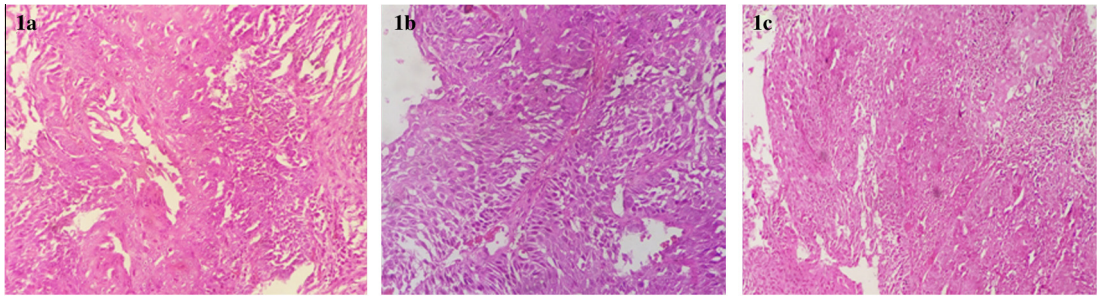


**Figure 1** (a) (20×) Pleomorphic polygonal cells arranged in sheets with intercellular bridges having round to oval central hyperchromatic nuclei and abundant eosinophilic cytoplasm along with numerous atypical mitosis. (b) (40×), (c) (20×) pleomorphic polygonal squamous cells with intercellular bridges and brisk atypical mitosis.

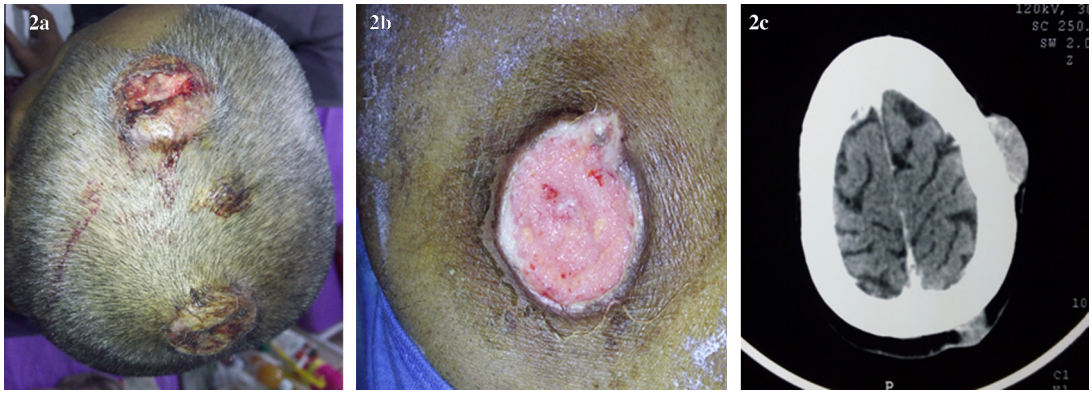


**Figure 2** (a) Three ulceroproliferative growth over scalp, largest growth is of size 5 × 5 × 2 cm. (b) Ulceroproliferative growth is of size 5 × 5 × 1 cm at the left posterior thigh. (c) CECT showing showed heterogeneously enhancing masses in the scalp without ant bony erosion.

**Table 1** Cases of carcinoma tonsil with cutaneous metastasis.

| Authors name | TNM stage at diagnosis | Radical treatment | Disease free interval | Sites of metastasis | Palliative treatment & follow up |
|---|---|---|---|---|---|
| Dasmajumdar et al. [2] | T3N2cM0 | EBRT 70 Gy/35 fractions | 2 years | Left periorbital region (single lesion) | Palliative RT (20 Gy/5#). Lost to follow up |
| Chikkannaiah et al. [3] | T2N0M0 | Radical radiotherapy | 1.5 years | Frontoparietal region of scalp (single lesion) | Died within 2 days of diagnosis |
| Singh et al. (Present case) | T3N1M0 | Concurrent chemo-radiotherapy | 6 months | Scalp and left thigh (multiple lesions) | On palliative chemotherapy |

defined margin, irregular surface, firm to hard in consistency, restricted mobility having purulent discharge along with a solitary ulcer measuring 5 × 5 × 1 cm with rolled up well defined margin, irregular surface, firm in consistency, restricted mobility with few bleeding points over the floor over the posterior aspect of the left thigh. Patient's Ear, Nose, Throat (ENT) evaluation was normal with no evidence of primary disease.

Patient's ECOG performance status was 3 with generalised weakness. A contrast enhanced computed tomography (CECT) scan head and neck showed heterogeneously enhancing masses in the scalp without any bony erosion with no residual lesion at the primary site (tonsil) (Fig. 2c). Histopathological examination from the scalp (Fig. 1b) and thigh lesion (Fig. 1c) revealed moderately differentiated squamous cell carcinoma, which was consistent with the histopathological picture of primary disease.

Considering the advanced and metastatic disease with poor performance status patient was kept on palliative chemotherapy with single agent injection methotrexate.

## Discussion

Cutaneous metastasis is very rare phenomenon and it accounts for about 0.6–1.4% of all visceral metastasis [4–6]. Cutaneous metastasis occurs either by hematogenous or lymphatic route. Malignant melanoma and breast carcinomas are the most common cause of cutaneous metastasis, followed by carcinoma

lung, large intestine, ovary and oral cavity [7]. Visceral metastasis is uncommonly seen in carcinoma tonsil with most common sites being lung (66%), liver (22%) and bone (10%) [8].

There have been only two cases of carcinoma tonsil with cutaneous metastasis reported so far in the literature (Table 1).

The T stage and N stage are most common factor associated with distant metastasis in head and neck carcinoma, with a median time of distant metastasis ranging between 8 and 15 month [9–12]. In a retrospective study of hundred patients of radically treated head and neck carcinoma, median time to distant metastasis was 7.4 month and nodal stage (N2 and N3) was the only factor responsible for early distant metastasis on multivariate analysis [13]. In our case the patient also developed early distant metastasis to skin within six months of completion of radical treatment which might be due to higher T staging and nodal involvement.

Cutaneous metastasis is considered a poor prognostic marker [2]. There is paucity of literature defining the survival and treatment of these patients. According to Yoskovitch et al. [14] average survival after cutaneous metastasis in head and neck malignancies is 7.2 months.

## Conclusion

Cutaneous metastasis is an extremely rare entity in carcinoma tonsil and carries poor prognosis. It usually occurs 1–2 years after the initial diagnosis of primary disease. Due to lack of available literature, it is difficult to predict survival. As our patient is well tolerating the chemotherapy despite short disease free interval time and multiple cutaneous metastases, he will be curiously followed up to know course and response of the disease.

## Conflict of interest

We have no conflict of interest to declare.

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