

Cutaneous Metastasis of Squamous Cell Carcinoma – A Case Report

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Abstract: Cancer of the oral cavity makes up approximately 30% of all head and neck region tumors. Skin metastasis usually occurs in the neck, scalp, and over the skin near the primary site. Cutaneous metastases are associated with poor prognosis and advanced disease. We report a case of carcinoma tongue, post hemiglossectomy and post EBRT(External beam radiotherapy) presented with scalp nodule.

Keywords: Skin metastasis, carcinoma tongue, hemiglossectomy, EBRT.

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I. Introduction

Cancer of the oral cavity makes up approximately 30% of all head and neck region tumors. Skin metastasis is rare with an incidence ranging between 0.7% and 2.4%. Skin metastasis usually occurs in the neck, scalp, and over the skin near the primary site^[6]. The most common mode of spread of SCCN (Squamous cell carcinoma of Head and Neck) is via regional lymph nodes to the cervical drainage areas^[2]. Other lymph node groups are rarely involved. Distant metastases to lung, liver and bone are via haematogeneous spread. Cutaneous metastases are associated with poor prognosis and advanced disease^[3].

We report a case of carcinoma tongue, post hemiglossectomy and post EBRT presented with scalp nodule.

II. Case Report

30 year old man presented with history of Carcinoma of Tongue who underwent hemiglossectomy and post operative EBRT for tumour bed and lymph nodes, 2years back. Now complaining of slowly enlarging scalp nodule of size 4x4cms in the parietal region since one month(Fig 1).

Basic investigations were done and biopsy was taken from the nodule, sent for histopathological examination. Histopathological examination revealed tissue lined by stratified squamous epithelium with underlying stroma showing nests and sheets of malignant squamous epithelial cells with moderate eosinophilic cytoplasm and pleomorphic hyperchromatic nuclei with increase in mitoses - Metastatic Squamous cell carcinomatous deposit in scalp(Fig 2 & 3).



Fig 1 Scalp nodule – 4x4cms in parietal region

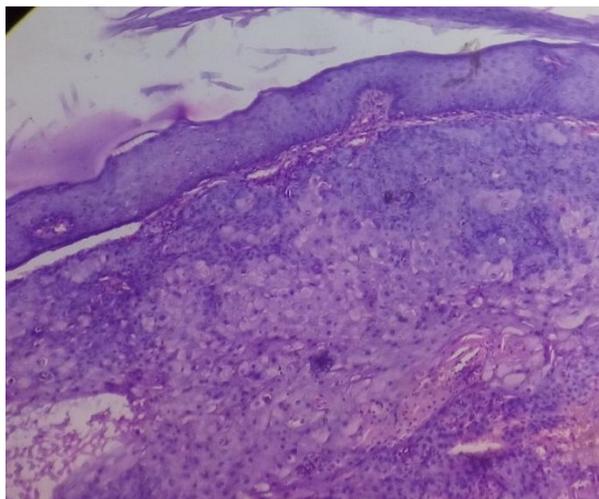


Fig 2 10X view – Scalp nodule

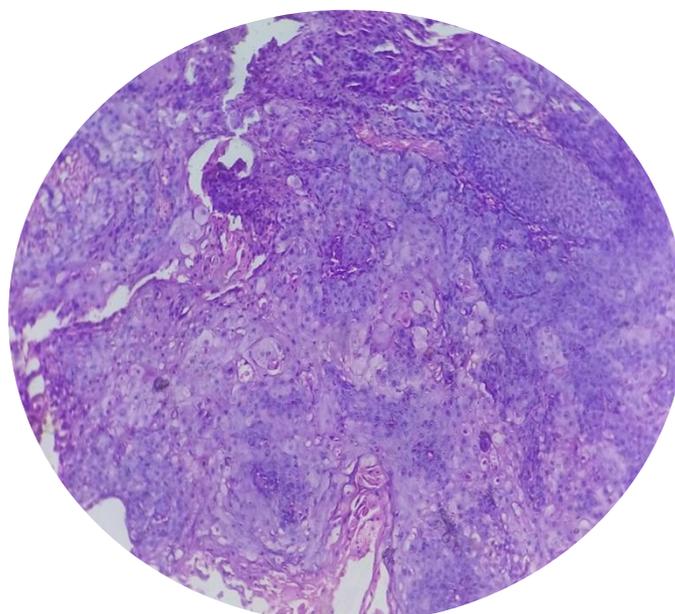


Fig 3 40X view – Scalp nodule

III. Discussion

The frequency of skin metastasis from all internal malignancies varies from 0.7% to 9%^[7] of all cancer patients and they are commonly associated with breast or lung primaries^[3]. Cutaneous metastases from SCCHN in contrast to other internal malignancies are rare and literature review indicates a much lower incidence of between 0.8-1.3percent^[4].

Distant metastases commonly develop before, during, and after treatment for head and neck squamous cell carcinomas. The lungs were the most-frequent location of distant metastases in patients with oral cavity cancer (54.3%), oropharyngeal cancer (50.0%), and hypopharyngeal cancer (60.5%). Bone (57.6%) was the most common site of metastasis in patients with Nasopharyngeal carcinoma, while laryngeal cancer tended to metastasize to the liver (80%)^[2].

Skin metastases - The median time to occurrence was 6 months. Ninety percent of patients died of disease within a median of 3 months (1 to 16 months) following diagnosis. The development of skin metastasis is most closely related to the presence of two or more cervical metastases and/or extracapsular spread of tumor in the cervical metastases^[1].

Cutaneous metastases are thought to develop from haematogenous spread if they appear distally and via a dermal lymphatic spread if they occur in close proximity to the primary tumour^[5]. Cologlu et al reported that the pulmonary circulation can possibly be bypassed via the azygous and vertebral venous systems and Batson's plexus therefore allowing for skin implantations. They have also reported that tumour cells may survive the filtration process of the pulmonary circulation and thus metastasize to distant skin sites.^[5]

Histologically, cutaneous metastases are distinguished from primary cutaneous squamous cell carcinoma as by the presence of a heavy dermal component that has no connection with the epidermis. There may be associated necrosis, inflammation and lymph vascular invasion^[4].

Pitman et al reported that the development of cutaneous metastases are more common if two or more cervical lymph nodes metastases are present or there is extracapsular spread of tumour in the cervical nodes^[1]. Disease stage does not appear to predict for occurrence of cutaneous metastases^[4].

The occurrence of cutaneous metastases is associated with a very poor prognosis. Median survival from onset of cutaneous metastases ranges from three to seven months, with zero percent one year survival rate^[1].

Treatment is palliative and surgical excision, radiotherapy and chemotherapy have all been used depending on the clinical circumstances^[3]. Berger and Fletcher^[8] in their study reported that length of survival was approximately 3 months after skin metastasis becomes clinically evident in HNSCC. The treatment intent is usually palliative with the available options being surgical excision, chemotherapy, External beam radiotherapy or a combination of these.

IV. Conclusion

Distant skin metastasis from HNSCC is hardly reported in literature. The appearance of new skin lesions in patients of HNSCC mandates a vigilant history and thorough physical examination. All such lesions should be viewed with a high index of suspicion. The occurrence of cutaneous metastases is associated with a very poor prognosis.

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