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Introduction

Cutaneous metastases in patients with squamous cell carcinoma (SCC) of the head and neck are rare and develop in 1-2.4% of these cases.¹ Tonsillar SCC is a minority of head and neck cancers, making up approximately 10% of cases.^{2,3} To our knowledge, only 8 cases of cutaneous metastatic tonsillar SCC previously have been reported in the English literature.¹⁻⁷ Here, we present the third case of a female with cutaneous metastatic tonsillar SCC.^{3,6}

Fig. 1. Physical examination demonstrated a firm violaceous plaque with ulceration on the patient's left lateral neck.

Fig. 2. (H&E). Histopathological examination demonstrated focal areas of squamous differentiation with a distinct basaloid morphology.

Fig. 3. (Cytokeratin). Immunohistochemical staining for cytokeratin was positive, consistent with a diagnosis of basaloid SCC from the primary tonsillar SCC that metastasized to the skin.

Case Report

A 46-year-old female presented to the dermatology clinic with a mass on her left lateral neck. She had a past medical history of tonsillar SCC of her left neck that was diagnosed and treated approximately two years previously, but she did not require radiation therapy or chemotherapy. She had associated lymphadenopathy at the time of diagnosis that gradually resolved.

She subsequently developed a small, nontender mobile lesion on her left neck approximately one and a half years after the diagnosis of her tonsillar SCC. Over the next six months, the lesion increased in size. The lesion ulcerated and also started leaking within two months of being noticed by the patient.

Physical examination revealed a firm violaceous plaque with ulceration on the patient's left lateral neck. Histopathological examination demonstrated focal areas of squamous differentiation, but the features were not typical of a well-differentiated cutaneous SCC. The cells had a distinct basaloid morphology suggestive of either neuroendocrine carcinoma or possibly a metastasis of the patient's known tonsillar SCC. Immunohistochemical staining for cytokeratin was positive, and stains for cytokeratin-20 and INSM-1 were negative, ruling out neuroendocrine carcinoma and favoring a basaloid SCC, likely a metastasis from the patient's tonsillar SCC. Staining for p16 was negative. The slides from the needle biopsy of the patient's primary tumor were obtained and also showed a basaloid morphology in addition to the squamous morphology, confirming the diagnosis of metastatic tonsillar SCC. It was recommended that the patient follow up for further surgical management.

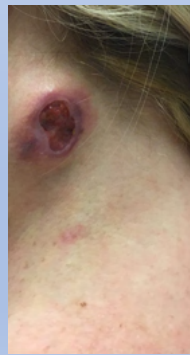


Fig. 1

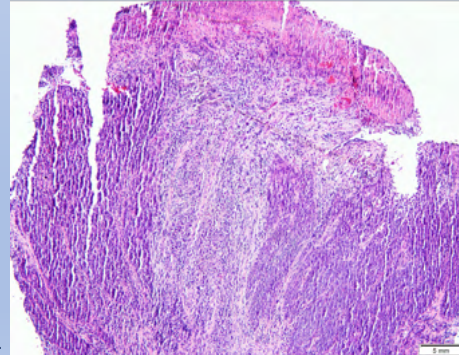


Fig. 2

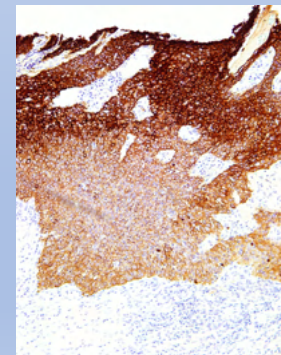


Fig. 3

Discussion

Cutaneous metastatic tonsillar SCC is extremely rare and indicates a poor prognosis.^{2,4,8} In a retrospective review by Yoskovitch et al,⁸ the average survival time for patients with skin metastases in SCC of the head and neck was 7.2 months. Risk factors for tonsillar carcinoma include alcohol, smoking, and human papillomavirus (HPV) infection.^{1,2,8} Basaloid SCC tends to metastasize, and 6 of the 8 reported cases of metastatic tonsillar SCC have occurred in males.^{1,2,4-7}

In cases of SCC of the head and neck that are recurrent or metastatic, HPV positivity is a favorable prognostic factor.¹ Radiation, chemotherapy, and surgery are palliative treatment options.^{1,6} One patient had resolution of her skin metastasis with combined therapy of cetuximab, carboplatin, and fluorouracil.³ Another case described clinical resolution of cutaneous lesions, which demonstrated high expression of PD-L1, and improvement on imaging (positron emission tomography/computed tomography) of metastatic lymph nodes with nivolumab therapy.¹ With small number of reported cases of cutaneous metastatic tonsillar SCC, information regarding optimized treatment of patients is limited, although HPV testing may be useful to guide treatment decisions.¹

Conflicts of Interest: Haley D. Heibel, Chris Bandel, Claire Reddick, and Clay J. Cockerell declare that they have no conflicts of interests that may be related to the contents of this case.

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