Spontaneous Regression of Mucosal Melanoma  
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ABSTRACT

Objective: We describe a case report of a patient with a mucosal melanoma with confirmed diagnosis by biopsy who undergoes a wide local excision of the tumor and is found to have no evidence of melanoma in the specimen.

Methods: A 49-year-old female presents with a pigmented lesion on the hard palate which is biopsied and found to be consistent with a spindle-cell type melanoma with a depth of 2.3 mm. She undergoes a PET/CT and a wide local excision of the lesion.

Results: PET/CT does not show hypermetabolic activity either at the lesion or elsewhere in the head and neck. The histopathology of the excision sample shows oral mucosa with focal cicatrix formation, chronic inflammation, and pigmented macrophages, but no evidence of melanoma.

Conclusions: This case demonstrates the concept of spontaneous regression of melanoma, which has been described in the past. This is the first case, however, of spontaneous regression reported in a mucosal melanoma lesion. Analysis of spontaneous melanoma regression may help to understand this phenomenon better and lead to improved immunotherapy.

INTRODUCTION

Mucosal melanomas are rare, with an incidence little over 1% of all melanomas reported.1 The prognosis is dismal with a five-year survival between 10 and 20%.2 Spontaneous regression of melanoma is a rare phenomenon, which has yet to be described in the literature for mucosal melanomas. Spontaneous regression refers to partial or complete disappearance of a malignant tumor in the absence of all treatment or in the presence of therapy, which is considered inadequate to exert a significant influence on the disease. We present a patient who had a melanoma of the hard palate that regressed without treatment.

CASE REPORT

A 46 year-old Caucasian female presents with a pigmented lesion on her hard palate. She notes its presence for 4 weeks prior to being seen. The lesion is slightly tender to palpation, but does not bleed or cause her any problems. She denies any weight loss, nasal obstruction, dysphagia, or odynophagia. Her medical history is significant for mitral valve prolapse and multiple back surgeries. Her only medication is a blood pressure pill. She has a smoking history of a half a pack of cigarettes a day for 36 years.

On examination, she has a 1 x 2 cm pigmented lesion on the roof of the hard palate, just left of midline with some central ulceration. It is tender. The rest of her examination is unremarkable.

She has an incisional biopsy performed by another physician which showed a spindle-cell type malignant melanoma, the depth of which is 2.3 mm. S-100 and Melan-A staining are both positive and confirmatory (see Figures 1 and 2). She has a PET/CT scan subsequently which shows no hypermetabolic activity, and she undergoes video-assisted thorascopic surgery to biopsy lung nodules which are found by CT scan (but not hypermetabolic). The biopsy is negative for malignancy.

She undergoes a wide local excision of the lesion on the hard palate with no reconstruction. The pathology shows oral mucosa with focal cicatrix formation, chronic inflammation, and pigmented macrophages. (Figure 3) There is no evidence of melanoma. Because of these findings, she is being closely followed, with no apparent recurrence or metastasis to date.

DISCUSSION

Mucosal melanomas are a distinct subtype from its cutaneous counterpart with 40-50% occurring in the head and neck. The nasal and oral cavities are the most common sites of presentation. Spontaneous regression of melanoma, which was first reported in the 1950s, has been described a number of times in the literature, though complete regression is rare. At least 38 cases have been presented, though none were mucosal lesions.3 This case is the first reported in the literature of a mucosal melanoma that exhibits spontaneous regression. Possible theorized mechanisms include immunologic, endocrine, inflammatory and tumor nutritional factors.4 Previous case reports have shown a strong histiocytic response to tumors with spontaneous regression. A small proportion of patients with metastatic disease respond to vaccines, interferon, and interleukin (IL)-2 therapy, showing that even with metastatic disease, there is potential for an immune response to combat the disease. Work is in progress in order to identify genes responsible for this phenomenon.5 As the mechanisms of spontaneous regression are better understood, there is hope to modulate immune response to better fight this disease and reduce mortality.

REFERENCES