

## Malignant Melanoma of Hard Palate: A Case Report

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### Abstract

Malignant melanoma (MM) of oral cavity is a rare tumor. Primary oral MM represents about 0.2-8% of all melanomas [1]. Intr orally, hard palate and maxillary gingiva are the most common involved sites. Here, we are reporting a case of malignant melanoma of hard palate, due to its rarity, aggressive clinical course and poor prognosis. This case highlights the importance of maintaining a high index of suspicion for early detection and diagnosis for any pigmented lesion of the oral cavity.

**Keywords:** Malignant Melanoma; Hard Palate

### Abbreviations

MM: Malignant Melanoma; ENTOPD: Otolaryngeal Out Patient Department

### Introduction

Malignant melanoma (MM) is a potentially aggressive tumor of melanocytic origin [1]. Primary oral MM represents about 0.2 - 8% of all melanomas [1]. The most commonly affected oral sites are hard palate and maxillary gingival [2]. Clinically, lesion may presents single or multiple as a pigmented (variation of colour, with black, brown, grey, purple and red) macular or proliferative lesion to a nonpigmented lesion which may be, primary or metastatic. Satellite foci around the primary may also be present [3]. The tumor surface may be smooth or ulcerated. Other signs and symptoms include bleeding, pain, increased mobility of teeth, and ill- fitting dentures. Regional lymphadenopathy may be present and indicate a poor prognosis [2].

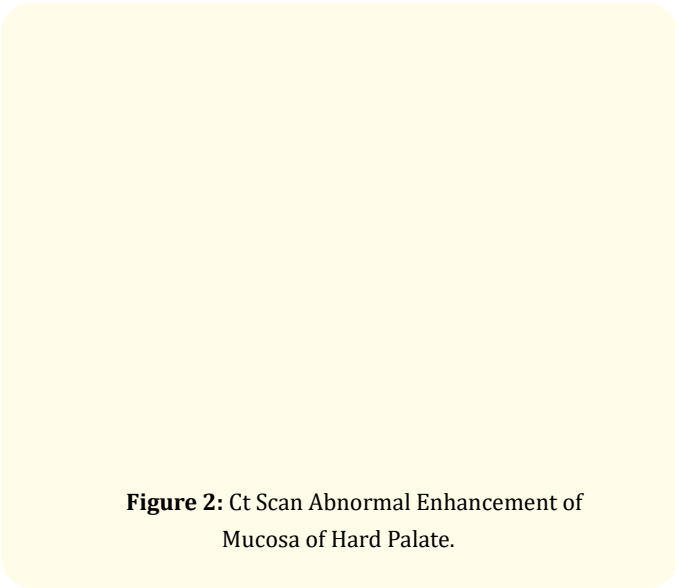
Here, we are reporting a case of malignant melanoma of hard palate, due to its aggressive clinical course and poor prognosis, hence early diagnosis is warranted.

### Case Report

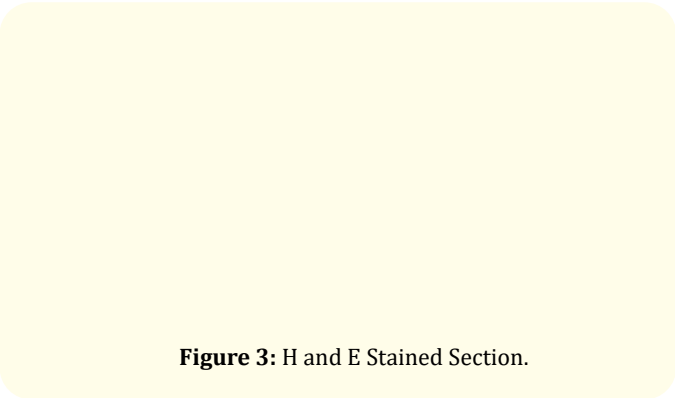
A 54 years old male patient reported to the department of ENT OPD with chief complaint of ulcer over the hard palate since 15 days. He gave history of smoking and tobacco chewing for about 15 years. On intraoral examination, 0.5x0.5cm ulcer was present over the hard palate with blackish discoloration of mucosa (Figure 1). No lymphadenopathy was noted. Rest of systemic examination

was within normal limits. On Computed Tomography scan showed abnormal enhancement measuring 1.9X0.5 cm at the mucosal surface of hard palate (Figure 2). There was no destruction in surrounding area. A biopsy was performed. We received multiple grey brown soft tissue pieces altogether measuring 0.8X0.5X0.2cm. Sections examined showed stratified squamous epithelium lined tissue. The epithelium was focally ulcerated. Sub epithelium tissue showed presence of tumor cells which were arranged in the form of nests and sheets. The tumor cells showed moderate pleomorphism. The individual cell had moderate amount of cytoplasm, high nuclei cytoplasmic ratio with prominent nucleoli. The cytoplasm of few cells had coarse brown pigment (Figure 3 and 4). The tumor cells showed abnormal mitotic figures 0-1/10HPF. On Immunohistochemistry tumor cell were positive for HMB45 and S-100 (Figure 5 and 6) Hence, the diagnosis of malignant melanoma, of hard palate was made.

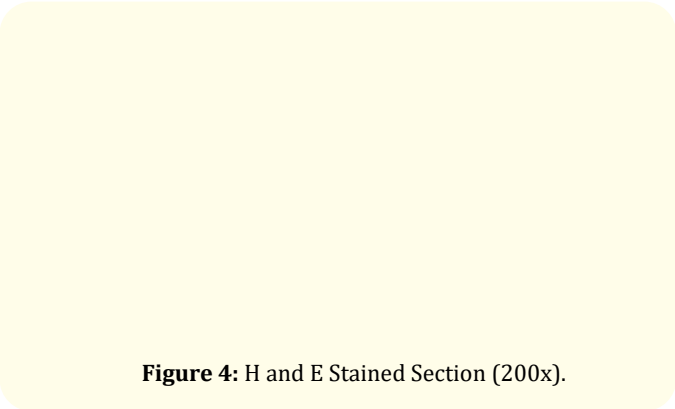
**Figure 1:** Black Color Discolourtion Of Hard Palate.



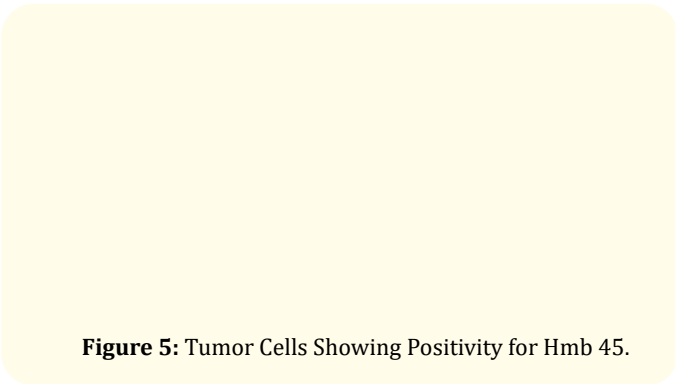
**Figure 2:** Ct Scan Abnormal Enhancement of Mucosa of Hard Palate.



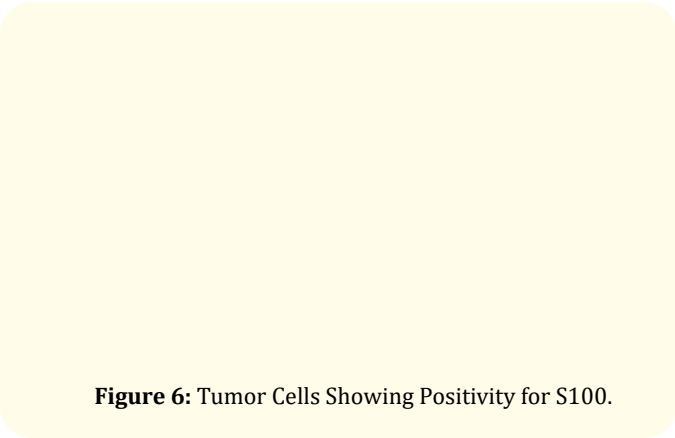
**Figure 3:** H and E Stained Section.



**Figure 4:** H and E Stained Section (200x).



**Figure 5:** Tumor Cells Showing Positivity for Hmb 45.



**Figure 6:** Tumor Cells Showing Positivity for S100.

Discussion

Primary malignant melanoma of the oral cavity is rare, which accounts for about 0.2 - 8% of all melanomas [1]. The risk factors include cigarette smoking, denture irritation, alcohol consumption and immune suppression [4]. In our case the patient gave history of smoking and tobacco chewing for a long duration. According to literature it shows a racial predilection with higher incidence in blacks and Japanese. It most commonly affects adults with peak incidence in sixth decade of life.

It may be asymptomatic in the early stages. But in most cases it is presented in late stage with complaints of increase in the size of the lesion, pain, bleeding or ulceration [2]. The two most common clinical growth patterns are lentiginous and nodular.

The confirmation of diagnosis is done by histopathological examination of biopsy of clinically suspicious lesion. Oral MM usually shows junctional activity and upward migration of the malignant cells. Special stains like Fontana silver stain is helpful in approximately 75% the cases. Immunohistochemical demonstration of the neuronal specific S-100 protein, HMB- 45 and Mart- 1 (Melan A) [5]. is a useful diagnostic indicator, especially if the tumor is of amelanotic type [6]. In our case, tumor cells were positive for S-100 and HMB- 45.

Differential diagnosis includes other forms of pigmented oral lesion, diseases like melanocytic nevus, melanoacanthoma, smoking associated melanosis, oral melanotic macule, physiologic or racial pigmentation, Addison's disease, heavy metal poisoning [7] and Kaposi's sarcoma [8].

Radical surgery is the treatment of choice for oral melanoma. [9] Radical surgery in combination with radiotherapy and chemotherapy or radiotherapy alone is preferred in inoperable tumors or in the elderly [2]. Immunochemotherapy has been shown to be useful as an adjuvant to surgical resection [2]. Metastatic spread via the bloodstream may occur early to the lungs, liver, brain or bone, and later metastatic spread to the local lymph nodes occurs. The prognosis of oral lesions is worse than

skin lesions, with 31% of patients with localized disease surviving for 5 years, falling to 5.2% if cervical metastasis is present [10]. The worse prognosis of oral mucosal melanomas is due to the late presentation of patients. Rich vascularity and lymphatic drainage of mouth favors earlier metastatic spread to regional lymph nodes and to distant sites such as the lungs and vertebral column [10]. Early diagnosis is essential for successful treatment and is perhaps the key factor in improving the prognosis of Oral MM.

Conclusion

Malignant melanoma of hard palate is rare tumor and has aggressive course of growth with poor prognosis. So early diagnosis and treatment is warranted.

Conflicts of Interest

There are no conflicts of interest.

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