

## CASE REPORT

# Metastatic Malignant Melanoma of the Maxillary Gingiva: A Case Report

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**Abstract: Background:** Mucosal malignant melanoma is a rare but aggressive tumor of the oral cavity that accounts for only 0.2-8% of all melanomas. It can take different forms. A biopsy with histopathologic examination is recommended to confirm the diagnosis. Because of its less favorable prognosis an early diagnosis is preferred.

**Methods:** A 54 years old patient presented with submandibular swelling. An examination of the oral cavity revealed a melanotic lesion on the maxillary mucosa.

**Results:** The examination found a sessile black-brown nodular lesion located on the maxillary gingiva measuring 2cm. Anatomopathological analysis concluded to a primary malignant melanoma of the gingiva positive to HMB45 and S1000. No other lesions were found on the complete body CT scan.

**Conclusion:** Malignant melanoma has a poor prognosis, because of its aggressivity, and difficulty of the treatment. Earlier recognition of this condition makes the diagnosis easier.

**Keywords:** Malignant melanoma; Diagnosis; Gingiva

## 1. Case presentation

A 54 years-old male, chronic smoker was referred to our department at 20 August hospital for a swelling of the submandibular region, which has appeared 3 months ago increasing gradually in volume. Clinical examination revealed a mass in the submandibular area, with no inflammatory signs around, measuring about 4 cm, mobile, with a firm consistency. There was no other lesion in the cervical area, the rest of the clinical exam was typically normal.

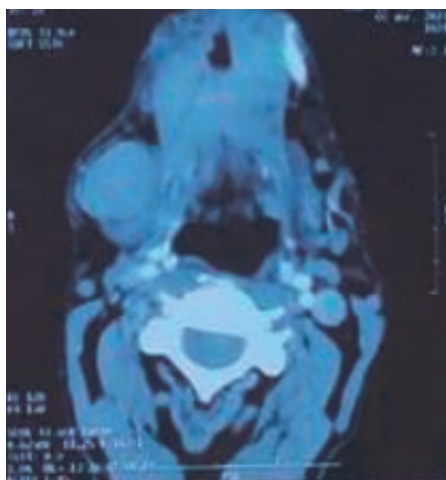
An ultrasound was performed revealing a right submandibular lymph node (IB) measuring 25 mm and the CT scan revealed an oval formation on the outer surface of the submandibular gland enhanced after contrast injection measuring 27 mm.

An excision of the lesion was decided with frozen section examination, and depending on the result a decision is going to be made.

The patient undergone surgery, while being under anesthesia a meticulous examination of the oral cavity associated with a panendoscopy showed a sessile black-brown nodular lesion of the maxillary gingiva in front of the third molar measuring about 20 mm. There was no other visible lesion.



a. The maxillary lesion



b. a CT scan image showing the submandibular metastasis

A biopsy on the melanotic lesion was made with an extemporaneous exam as well.

The microscopic analysis on the lymph node concluded to a metastatic undifferentiated tumor proliferation with necrotic, hemorrhagic deposit and brownish pigment. The rest of the salivary tissue surrounding the lesion is normal. On the gingival lesion they conclude to tumoral undifferentiated proliferation with important brownish deposit. As the neoplastic cells were positive for HMB-45 and S100 protein, the Immunohistochemistry concluded to a gingival melanoma with lymph nodes metastasis.

The patient was treated with hemimaxillectomy with bilateral neck dissection. A complete body computed axial tomography scan showed no other systemic metastasis. The treatment was followed by radiation. the follow up showed no local recurrence or metastatic lesion.

## 2. Discussion

Gingival primary oral malignant melanoma is a rare aggressive neoplasm comprising of melanocytes, its etiology is still unknown, with the propensity to metastasise or invade local tissues<sup>[1-2]</sup>. Oral melanoma may appear in various forms including a pigmented macula, pigmented nodule, large pigmented exophytic lesion, or an amelanotic variant of any of these three forms<sup>[3-4]</sup>.

The exact incidence rate of oral melanoma is not available. Melanomas of oral cavity makes up 0.5% of all oral neoplasm and 0.2-8% of all malignant melanomas<sup>[5]</sup>. It is a rare aggressive neoplasm usually found on the hard palate and the gingiva with predilection for the maxilla. The mandibular form is still rare<sup>[6]</sup>. Preexistent nevi can develop to some forms of melanoma, but most of them arise de NOVO<sup>[7]</sup>.

OMM can be primary or metastatic from another lesion, elsewhere. The diagnosis depends on several criteria. Melanomas could be classified into five types based on their clinical appearance: Pigmented nodular, nonpigmented nodular, pigmented macular, pigmented mixed and nonpigmented mixed<sup>[6]</sup>.

The differential diagnosis may include irritated naevus, blue nevi, spitz nevi, hemochromatosis, traumatic haematoma, hemangioma, Kaposi sarcoma and PeutzJeghers syndrome<sup>[8,9]</sup>, pigmentation of exogenous origin like ink, tattoo, gold silver, benign conditions such as reactive denture hyperplasia, amalgam tattoos and metal deposit<sup>[4]</sup>, and many other conditions sharing macroscopic characteristics.

Immunohistochemistry has an important role to confirm the diagnosis. The majority of melanomas are reactive to S100 protein which is sensitive but not specific, and markers like homatropine methylbromide HMB45, melan-A and antityrosinase that are specific<sup>[10,11]</sup>. Only 5% are amelanotic.

Surgery is the main treatment for oral melanomas. The complementary treatment includes chemotherapy and radiation.

The excision should be made with sufficient margins, at least 1.5 cm depending on sun et al and 1.5-2 cm according to Gilain *et al.* Radiation therapy may be useful for early or *in situ* melanomas.

### 3. Conclusion

Malignant melanomas are an unusual and rare tumor of the oral cavity, it has a high risk of metastasis. Histopathological confirmation is recommended. The main treatment is surgery even though it can be difficult due to anatomic restraints followed by radiotherapy and the early diagnosis is key to manage these lesions.

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### Conflict of interest

The authors declare they have no competing interests.

### Ethics approval

Written informed consent was obtained from all the participants of this study.

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