

Case Report

Oral Melanoma – A Case Report

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ABSTRACT:

Oral melanoma (OM) is a preferentially rare malignant tumor originated from the proliferation of melanocytic cells. It comprises of 1 - 2% of all oral malignancies. This tumor is predominantly witnessed in the hard palate and the maxillary alveolar mucosa. Oral melanoma shows vertical and radial growth phases that makes its early diagnosis difficult. Thus its metastasis is more common. In this article we have reported about a case of a 58 year old patient who had melanoma lesion in his oral cavity. The lesion is present in the left upper gingival region. We performed biopsy for the patient and arrived at our final diagnosis. We have discussed about the patient's history, clinical features of the lesion, histopathological features, prognosis and treatment. In this report histopathological features is been emphasized. Surgery is the ultimate goal of treatment for oral melanomas. However adjuvant therapy with dacarbazine, platinum analogs, nitrosoureas and interleukin-2 is also prescribed. The patient will however have only poor prognosis as the lesion is very aggressive.

Key Words: Melanoma, Pigmentation, Spindle cells, Poor prognosis.

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INTRODUCTION:

Melanoma as a malignant lesion can occur from activated or genetically altered epidermal melanocytes(1). Melanocytes are the cells that are pigmented and found in the basal layer of the epidermis and mucous membrane. Melanomas of the oral mucosa were first described by Weber in 1859(2). It is a lesion of adulthood and is rarely seen below 20 years of age. The mean age of occurrence is 56 years and male to female ratio is 2:1.(3). Melanomas may be cutaneous or extracutaneous lesions. The melanomas that are extracutaneous are rare and are very aggressive that comprise of ocular, mucosal and leptomeningeal melanomas (4). Approximately 91.2% of melanomas occur on skin surfaces, 5.2% on eyes and only 1% of melanomas arising from mucosal surfaces. In the mucosal surfaces, about 55.4% are presented in head and neck region. In the oral cavity, the most common primary sites are hard palate and maxillary mucosa. Buccal mucosa, mouth floor, mandibular gingiva are rare affected sites (5). The pathogenesis and etiology of mucosal melanoma are still unclear. The melanomas that

primarily occur in the oral cavity are believed to arise either *de novo* (30% of cases) or from nevi or from pre-existing pigmented areas(6).

In this article we have discussed about a case of oral melanoma. The patient has a soft swelling in the left upper gingival region. The diagnosis was made after proceeding biopsy and a subsequent histopathological examination.

CASE REPORT:

A male patient of age 58 years reported to our dental OP in Vinayaka Mission Sankarachariyar Dental College at Salem. The patient had a swelling intraorally in the upper left anterior gingival region. The patient was apparently normal and the past medical history and was not contributory. There was no relevant family history, personal history, dental history corresponding to the oral lesion. The patient had normal facial profile and no facial asymmetry was present.

Intraorally on inspection the swelling was in the anterior gingival region of the 2 nd quadrant. The swelling

extended from gingival region of 21 just medial to the labial frenum to the posterior gingiva in relation to 26. The lesion did not cross the mid line beyond the labial frenum. The lesion was also seen extending superiorly into labial and buccal vestibules and into the adjoining labial and buccal mucosae. The swelling was found to be black in color and is highly proliferative.

On palpation the swelling was tender inducing pain on pressure. There was no sign of bleeding or pus discharge from the lesion. On elevation of the lip the lesion was found to be indurated and separation of alveolar mucosa and labial mucosa with formation of a deep cavity was seen.



Fig 1: Showing the extra oral picture of the patient where there is absence of extraoral swelling and facial asymmetry.



Fig 2: Showing intra oral swelling of the patient involving left maxillary anterior gingival region and the adjoining alveolar mucosa and labial mucosa.

The laboratory investigations were done for the patient and all found to be normal. The lesion was excised and subjected to histopathological examination.

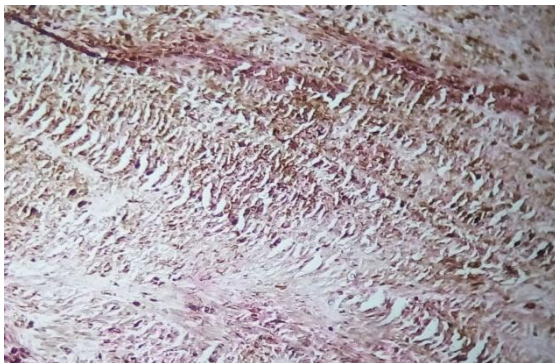


Fig 1: Photomicrographic view under low power showing malignant melanocytes in loose and fibrillar connective tissue.

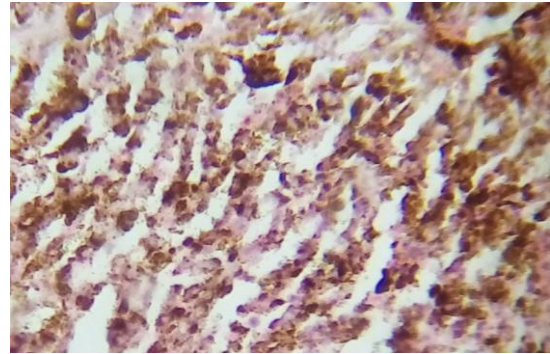


Fig 2: Photomicrographic view under high power showing malignant melanocytes with the features hyperchromatism, pleomorphism and increased nuclear cytoplasmic ratio.

In the histopathological examination the section showed parakeratinized surface epithelium with ulcerations. The underlying connective tissue was loose and fibrillar and showed numerous round cells and spindle shaped cells showing pleomorphism, hyperchromatism, increased nuclear cytoplasmic ratio and the cells were highly anaplastic. Some areas showed numerous melanin pigmentations. Infiltration of inflammatory cells also seen.

The final diagnosis was given as Oral Melanoma. The patient was then sent to a cancer institute for further treatment.

DISCUSSION:

Oral Melanoma are initially asymptomatic, and usually not noticed by the patients, which contributes for the delay of the diagnosis. Although OM often present as short history of rapid development mass, eventually it may develop as a slowly growing mass in amelanotic area present for months or years(2) which is similar to this case where the lesion was asymptomatic and the diagnosis was hence delayed. The clinical coloration of oral melanomas has a wide range, which can appear as black, brown, white, gray, purple, or reddish. The lesions are asymmetric, irregular in outline which is similar to this case where the lesion is black in color, asymmetric and has an irregular outline(4).

It is very important to establish the differential diagnosis for pigmented lesions of the oral mucosa, which includes amalgam tattoo, physiologic pigmentation (racial and post inflammatory), melanotic pigmentation induced by drugs, oral melanotic macule, nevi melanoacanthoma and other benign melanocytic lesions such as lentigo simplex. There are also some systemic diseases associated with intra and extraoral pigmentation including neurofibromatosis, polyostotic fibrous dysplasia, Addison disease, Peutz-Jeghers syndrome and multiple endocrine neoplasia syndrome(2). Berislav Topić et al proposed that Clinical verification of OM meets the ABCDE rules from the Anglo-Saxon and German dermatology literature: A, asymmetry; B, border irregularity; C, color variation; D, diameter >6 mm; and E, elevation. This typical clinical characterization of melanomas has been extended by Šitum et al from ABCDE to ABCDEFG, where ABCDE have the same characteristic as above, followed by: F,

feeling, itch, burn or pain; and G, growth, increasing size (1). In most instances, the melanoma cells contain melanin pigmentation, but they may be deficient in melanin (amelanotic melanoma). Considering that melanomas can mimic a variety of undifferentiated tumors, a lack of production of this pigment may cause diagnostic confusion at the light microscopic level (6) which is contradictory to our case where the melanocytes contained much of melanin pigments.

CONCLUSION:

Since 1980, Oral Melanoma patients has been treated with the following treatment protocols: (a) Surgical resection of intraoral tumors; (b) Neck dissection for clinically detected lymph node metastasis; (c) Initiation of adjuvant immunochemotherapy; (d) No biopsy because it could promote metastasis (7). On the whole Malignant melanomas of the oral cavity are different from cutaneous melanomas; and thus establishing new criteria for the diagnosis and treatment for this malignancy should be considered (6). The prognosis of oral melanoma patients has been reported to be extremely poor (7). Follow-up of the patient should be done which includes thorough checkup, chest X-ray and clinical photographs (3).

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