Late Diagnosis of Oral Mucosal Melanoma: Case Report

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Abstract
Primary oral malignant melanoma usually presents as a dark brown or black lesion. It is a rare malignancy, accounting for less than 1% of all melanomas and 1.6% of all head and neck malignancies, thus forming up to 0.5% of all oral malignancies in the world literature. In general, the prognosis of oral melanoma is poor and worse than that of cutaneous melanoma. The preferred treatment is radical surgery alone or in combination with radiotherapy, chemotherapy, and immunotherapy and immunomodulatory agents. A case of Oral Malignant Melanoma is presented here which was undetected during the first visit to the hospital. When a simple oral surgical treatment was carried out in that region, it resulted in the appearance of a massive pigmented lesion which was histopathologically diagnosed as malignant melanoma. This paper is presented to re-emphasize the fact that any pigmented lesion in the oral cavity should be viewed with suspicion and proper investigation (biopsy) should be carried out to rule out any untoward experiences later.

Key words: Primary malignant melanoma, Melanocytes

Introduction
Oral cancer accounts for approximately 3.5% of all human cancer, of which almost 96% are carcinomas. The primary malignant melanoma of oral cavity was first described by Weber in 1859. The incidence of primary oral malignant melanoma has been reported to be between 0.2 and 8% of all melanomas. Oral melanoma is initially asymptomatic. It may develop as a slowly growing mass and be present for months or years before being noticed. The color varies from bluish-black to tan-brown. There are a variety of forms such as pigmented maculae, nodule or large pigmented exophytic lesion. Other clinical modes of presentation could be as ulceration, swelling, bleeding nodular mass, rapid-enlargement or loosening of the tooth. Owing to the rarity of this tumor diagnosis and treatment remains a matter of debate without clear cut guide lines.

At present, the clinic pathological classification of oral melanoma is not yet clearly outlined; consequently, the skin form is often taken as a reference. In many cases (up to 30%), the diagnosis of melanoma is made on lesions, which have evolved from the pre-existing pigmented lesions. The poor prognosis of oral melanomas requires that pigmented lesions of undetermined origin be routinely biopsied. The surgical approach, combined with the chemotherapeutic one, is the first choice treatment.

OMM are highly aggressive with the tendency to metastasize and invade the surrounding tissues more readily than other oral malignancies. In general, the prognosis of oral melanoma is poor and the five-year survival rate ranges from 5% to 20%.

Case Report
A 42-year old male patient was reported with chief complaint of a painless slowly progressive intraoral swelling in the left anterior maxillary region of 7-8 months duration. It was noticed that there was a slightly raised brownish black lesion measuring 5-6 cm occupying almost the whole of the anterior half of hard palate on either side of mid palatine raphae (Fig.1).

Fig. 1: Malignant melanoma of hard palate

Radiographically no involvement of the underlying bone was detected. Distant metastasis was also not detected on clinical, radiographic and ultrasonographic examination of the patient. Past medical history was non contributory. An incisional biopsy of the lesion was done under local anesthesia and histopathology revealed malignant cells with heavy melanin deposits. The malignant cells were in nest or cluster in groups in an organoid fashion. The malignant epitheloid melanocytes showed vesicular nuclei with prominent nucleoli, nuclear pleomorphism, hyperchromatism and loss of cohesiveness of the cells, confirming the diagnosis of malignant melanoma (Fig. 2, 3 & 4).
Discussion

Melanoma is a neoplasm of epidermal melanocytes. It is one of the more biologically unpredictable and deadly of all human neoplasms. It is the third most common cancer of the skin.

Risk factors for oral mucosal melanomas are unknown. These melanomas have no apparent relationship to chemical, thermal, or physical events (e.g., smoking, alcohol intake; poor oral hygiene; irritation from teeth, dentures, or other oral appliances) to which the oral mucosa is constantly exposed. Although benign, intraoral melanocytes proliferations (nevi) occur and are potential sources of some oral melanomas; the sequence of events is poorly understood in the oral cavity. Currently, most oral melanoma is thought to arise de novo. The lesion usually appears as a deeply pigmented area, at times ulcerated and hemorrhagic, which tends to increase progressively in size. The proximity of the oral mucosal to the bone in hard palate and maxillary gingiva, together with the rich vascular supply present in the oral cavity further contribute to the metastasis of the melanomas.

Mucosal melanomas tend to present at an advanced stage, are more aggressive, and present in a vertical growth(nodular) phase of disease. The oral mucosal melanomas are classified by histopathologic pattern as in situ, invasive, and combined in situ and invasive. Most oral melanoma lesions (85.0%) are invasive or have both an invasive and in situ pattern.

Criteria for primary oral melanomas include; (1) demonstration of melanoma in oral mucosa, (2) presence of junctional activity, and (3) inability to demonstrate extraoral primary melanoma.

The differential diagnosis of pigmented lesions of oral mucosa include tattoo (amalgam, graphite), oral melanotic macule, nevi, melanoacanthoma, and melanoma.

A simple TNM (T, primary tumor size; N regional lymph node metastasis; M distant metastasis) clinical staging system for oral malignant melanoma is as follows:

Stage I primary tumor present only (Tany NOM0)
Level I pure in situ melanoma without evidence of invasion or in situ melanoma with 'microinvasion'
Level II Invasion up to the lamina propria
Level III Deep skeletal tissue invasion into skeletal muscle, bone, or cartilage

Stage II Tumor metastasis to regional lymph nodes (Tany N1 M0)

Stage III Tumor metastatic to distant sites (Tany Nany M1)

In the present case, focal pigmentation preceding the development of the actual neoplasm frequently occurred several months to several years before clinical symptoms appeared. Since the patient was not aware of the melanosis there was no question of him noticing any change in color or increase in size. The exuberant growth of malignant melanoma here clearly indicates that superficial spreading malignant melanoma in the form of a tan or a brown or black admixed lesion might have existed in the maxillary anterior palate which was mistaken for racial pigmentation. For this reason it has been suggested that the appearance of melanin
pigmentation in the mouth and its increase in size and in depth of color should be viewed seriously. Hence prophylactic excisional biopsy is always indicated for any focal pigmented lesion of the oral mucosa that does not have ‘an indisputably innocuous etiology’.

Conclusion: Early detection and treatment is essential for better prognosis in malignant melanoma and hence the need for clinicians to meticulously examine the oral cavity and biopsy of all pigmented lesions cannot be emphasized more. More efforts should be made to create public awareness so that early detection of such lesion can be made possible.

References

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