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CASE REPORT

Melanoma of the oral mucosa with cerebral metastasis: a clinical case

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KEYWORDS

Oral melanoma; Head and neck; Cerebral metastasis; Oral pigmentation Summary Oral melanoma (OM) is an infrequent neoplasia making up less than 1% of all melanomas, and which exhibits a much more aggressive behaviour than those found on the skin. We present a case of OM located on the hard palate, vestibular alveolar gingiva of the maxilla, and upper lip in a 75-year-old patient who developed a distant metastasis on the left parietal lobe. The advanced stage of the disease contraindicated any surgical intervention and it was decided to carry out palliative radiotherapy, but the patient died before treatment. © 2004 Published by Elsevier Ltd.

Introduction

Melanoma of the oral mucosa is an infrequent tumor which represents approximately 1% of all melanomas.^{1,2} This tumor is characterised by a marked aggressivity which manifests by both local and distant metastasis. It can appear at any age, but is less frequent under 30 years-of-age.³ Neither does a clear sexual preference exist,⁴ although some authors^{5,6} have found a greater male predilection. The most common oral locations of OM are the palate and maxillary gingiva, where 80% of all the oral melanomas are found.^{7–9} It can also appear, in decreasing order of frequency, on the jugal mucosa, mandibular gingiva, lips, tongue and floor of the mouth.^{6,10,11} The prognosis for a patient with OM is poor, since the average 5-year survival is between 5% and 29%.^{12–14} The objective of this article is to present our experience in the management of an OM with distant metastasis, and compare it with others described in the literature.

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Clinical case

A 75-year-old male who attended the Oral and Maxillofacial Surgery service at the San Vicente de Paul Hospital (Medellín, Colombia), presenting a painful pigmented lesion of 10 months evolution, located on the hard palate, vestibular alveolar gingiva of the maxilla and upper lip (Fig. 1). The medical history revealed arterial hypertension, controlled by drugs, and he was an habitual smoker of 20 cigarettes a day. On intraoral exploration the patient was without teeth on the lower jaw, and with some teeth on the upper. Clinically, the lesion presented a non-ulcerated exophytic pigmented mass, located on the upper gingiva which extended onto the internal surface of the upper lip, accompanied by swelling and dental mobility. Lymphatic



Figure 1 Image of the oral cavity showing the extensive oral mucosal melanoma.

nodules in the submandibular or cervical area were detected. The histopathological examination of an incisional biopsy of the gingiva revealed a malignant neoplasia composed of atypical melanocytic cells, with large, irregular, hyperchromatic nuclei and broad cytoplasm with melanotic pigmentation,



Figure 3 Cranial CAT showing a tumoral mass of 2×2 cm located on the left parietal lobe.



Figure 2 Histopathology of the lesion (hematoxylin-eosin staining) composed of atypical melanocytic cells, with large, irregular, hyperchromatic nuclei, and broad cytoplasm with melanotic pigmentation, which ulcerated the mucosa and infiltrated the corium with perivascular and perineural invasion.

which ulcerated the mucosa and infiltrated the underlying corium to a depth of 2 mm, with perivascular and perineural invasion; compatible with a melanoma (Fig. 2).

The extended study, consisted of a computerised axial tomography (CAT) with contrast of the cranium, face, neck and thorax, and likewise an abdominal echography. The cranial CAT revealed a tumoral mass of 2×2 cm located on the left parietal lobe (Fig. 3). The extensive size of the intraoral lesion, combined with the presence of cerebral metastasis contraindicated the surgical treatment of the tumor, and it was decided to carry out palliative radiotherapy. The patient died without having started treatment.

Discussion

Mucosal melanoma of the oral cavity is an infrequent tumor, which comprises less than 1% of all melanomas.^{1,2} The oral cavity is not the only location where it can be found, other mucosas where it may appear are: the eye, upper respiratory tract, vagina, vulva, anus and urethra.^{15,16} The most frequent oral locations are the gingiva and the palate, affecting the maxilla in 80% of cases.⁷⁻⁹ OM can appear at any age, being very infrequent below the age of 30.³ Some authors consider it to have a predilection for males, in a male-female proportion of approximately 2:1,^{5,6,8} although there is no clear evidence of sexual predilection.⁴ Its etiology is unknown, on occasions it locates on a pre-existing melanosis of long-term evolution. Other possible etiologic factors such as mechanical trauma, solar radiation and exposure to formaldehyde have been described.¹⁷

Early detection of the melanoma is the key to a possible cure. When it occurs on the skin it is visible and therefore easier to detect than other types of tumors, however, in the oral cavity it can remain asymptomatic for a long period of time.¹⁸ The first symptom that the patient finds is the presence of a pigmented, excrescent mass on the mucosa (85% of cases) which on rare occasions bleeds and ulcerates.⁹ On other occasions the first symptom is pain (15% of cases)⁵ or odontological alterations.

The differential diagnosis should be made against other melanotic tumors, physiological pigmentations, those related with general diseases, and chemical or physical pigmentations.^{9,19} On many occasions the differential diagnosis is exclusively histological. In agreement with Rapidis et al.,³ for a melanoma to be primary to the oral cavity it should fulfil three criteria: clinical and histological demonstration that it is a melanoma of the oral cavity, presence of junctional activity in the lesion, and the impossibility of demonstrating another primary tumor in the organism.

When confronting any histopathologically diagnosed melanoma present in the oral cavity, it is necessary to undertake an extensive study in order to evaluate the infiltration of the tumor and discount distant metastasis, since the prognosis for OM is poor, and depends fundamentally on the grade and location of the tumor. OM has metastatic predilection for the lung, liver, brain and bone.^{1,8}

The preferred treatment for OM is local ablative surgery,^{4,9} if the tumor is considered resectable. In the cases where distant metastasis has occurred, as in the case presented here, and/or where there are recurrences, the disease is considered as classically incurable, surgery being reserved solely for palliative care.

Finally, we should stress that an early diagnosis and treatment permits an increased survival for these patients. To achieve this, the oral cavity should be carefully examined, and all pigmented lesions which have no clear relationship to physical or chemical factors should be biopsied.

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