Intramucosal Nevus in the Oral Cavity

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ABSTRACT

Aim: The aim of this study is to report a clinical case of oral nevus

Background: Nevus is a congenital or acquired benign neoplasia that can be observed in the skin or mucous membranes. It is an uncommon condition in the oral mucosa. When it does occur, the preferred location is on the palate, followed by the cheek mucosa, lip and tongue.

Case report: In this case study, we relate the diagnosis and treatment of a 23-year-old female patient with an irregular, pigmented lesion of the oral mucosa that underwent excisional biopsy resulting in a diagnosis of intramucosal nevus.

Conclusion: Nevus can appear in the oral mucosa and should be removed.

Clinical significance: It is important for dental professionals to adequately categorize and treat pigmented lesions in the mouth.

Keywords: Brazil, Disorders of oral pigmentation, Intramucosal nevus, Mucosal melanocytic nevi, Oral pathology.

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BACKGROUND

Nevi may be defined as congenital or acquired, benign, pigmented neoplasms of the skin or mucosa, composed of nevus cells.¹⁻³ The main clinical features are a macule or papule, potentially ranging from brown to black

or blue. Approximately 22% of nevi are amelanotic. They are usually small in size, between 0.1 and 0.6 cm in diameter, elevated, and asymptomatic, which may help in the differential diagnosis with other pigmented lesions. Nevi may be located anywhere in the oral cavity, including the hard palate, the most common site of oral melanoma.

Nevi are classified based on their histological features, specifically on the behavior of nevus cells. The intramucosal nevus is the most common type in the oral cavity. In these, junctional activity does not exist and the nevus cells are grouped in the lamina propria and submucosa, and there is a conjunctive band separating these cells from the surface epithelium. The blue nevus is the second most common type, where the epithelium is not affected and appears as a mass of spindle cells containing melanin in the corium, and the presence of melanophages. Compound nevus is rare in the mouth and presents as groups of nevus cells in the basal area and foci of junctional activity in adjacent epithelium. The junctional nevus is the most rare type affecting the oral mucosa, and is characterized by proliferation of melanocytes at the junction of the epithelium with connective tissue. This type has a considerable tendency to malignancy.²⁻⁵

The main differential diagnosis is melanoma. In addition to initial diagnosis, it is important to point out the possibility that a lesion may evolve into a melanoma. The treatment is excisional biopsy with a histopathological exam to rule out malignant transformation. ^{1,3,4,6}

CASE DESCRIPTION

A 23-year-old, white, female patient was referred to the Clinical School of Dentistry at The Integrated Colleges of Northern Minas Gerais, Brazil (SOEBRAS/FUNORTE) due to the diagnosis of a pigmented lesion in the oral cavity during a routine evaluation. She presented with no family history of cancer and denied smoking and alcohol consumption.

On physical examination, mobile, painless, and superficial submandibular lymphadenopathy was observed. The intraoral examination showed the presence of an uneven, darkened spot, approximately 4 mm in diameter in the left oral mucosa (Fig. 1). There were no observable or reported harmful habits or signs of injury or trauma.

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Fig. 1: Macula of approximately 4 mm and irregular blackish color in the mucosa of the patient's left cheek



Fig. 3: The surgical area after closure with sutures

Therefore, an immediate excisional biopsy was performed. The incision for biopsy was elliptic, and the lesion was completely removed (Fig. 2) and the surgical area was sutured (Fig. 3). The removed material was fixed in 10% formalin and sent for anatomohistopathological examination, upon which the diagnosis of intramucosal melanocytic nevi was confirmed (Fig. 4).

DISCUSSION

Nevi are uncommon in the oral cavity. When they occur, the most common histological type of nevus is located in the mucous membrane. They are most often found in females, in the third and fourth decades of life. Often these lesions are found in routine dental examinations. Nevi located in the mucous membranes have been identified as having the most potential for transformation into melanoma, though some recent studies refute this assertion. However, due to the malignant potential of nevi and also due to the presence of pigmented macules



Fig. 2: Surgical defect after excision of the lesion

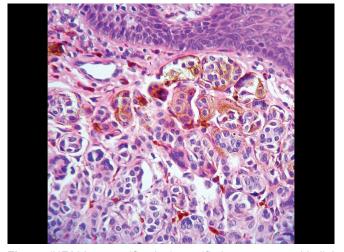


Fig. 4: (HE200× magnification) stratified squamous epithelial tissue with mild atrophy involving hypermelanotic nevus cells grouped in intramucosal nests

in approximately a third of patients with preliminary oral melanoma, it is advisable to carefully diagnose all pigmented lesions of the oral cavity.^{4,7} The ideal treatment is the removal of the lesion with a safety margin of 2 mm.^{1,2,8}

This case report is very similar to existent reports of the epidemiological and clinical reports of intramucosal nevus. Diagnosis and treatment in this case followed the standard operating procedures reported in the current literature.

CONCLUSION

Visual inspection of the oral cavity should be done very carefully because it may reveal pathological changes unnoticed by the patients themselves. Nevi, while uncommon, can occur in the oral cavity and should be differentiated from other pigmented lesions, including oral melanomas that, although also rare, have a high mortality rate.

CLINICAL SIGNIFICANCE

Health professionals must consistently pay attention to abnormal conditions of the oral cavity. Knowledge regarding how to diagnose and treat pigmented oral lesions empower dental health professionals to apply preventive treatments and avoid the development of malignancy.

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