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Oral Palatal Nevus – A Case Report

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Case Report

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Abstract: Pigmented lesions of the oral cavity are an heterogeneous group with several etiophatogenesis and they can have melanocytic or non-melanocytic origin . Solitary pigmented melanocytic lesions of the oral cavity are rare. Oral nevus is a benign proliferations of cells of melanocytic origin and they are rare, for this reason, the literature is poor. Diagnosis of pigmented lesions of the oral cavity and perioral tissues is difficult, therefore is essential the histopathological examination to make a correct diagnosis . The objective of this article is to present a rare case report of oral nevus in the palate. A 63 years old female patient reported a small black spot not bulging and asymptomatic. This lesion has been surgically removed and analyzed. The histological examination of the sample has confirmed the diagnosis and after a week the palate was completely healed.

Keywords: oral pigmented lesions, oral pigmented nevus, congenital melanocytic nevus, oral melanoma, oral cavity, desmoplastic, histopathology.

INTRODUCTION

Pigmented lesions of the oral cavity are a heterogeneous group with several etiophatogenesis and they can have melanocytic or non-melanocytic origin [1]. These lesions are divided into two groups. The melanocytic lesions are: oral nevi, oral melanotic macule, smoker's melanosis, melanoacanthoma, melanotic neuroectodermal tumor of childhood, post inflammatory pigmentation and oral melanoma, and the non-melanocytic lesions are: amalgam tattoos, exogenous pigmentations, heavy metal pigmentations, drug-induced pigmentations; while the drug-induced pigmentations may have a melanocytic or non-melanocytic origin [1].

The oral melanocytic nevi accounted for only 0.1% of 89,430 oral biopsies analyzed over 19 years [2]. Melanocytic nevi are congenital or acquired benign proliferations of cells of melanocytic origin derived from neural crest, typically found on the skin, but uncommon in the oral mucosa [2].

The term congenital melanocytic nevus (CMN) should be applied to benign melanocytic proliferations present at birth as well as to lesions that, although not apparent at birth, show typical clinical and histological features of CMN, but they are rare [3].

Melanocytic nevi are present in the epithelial layer, in the submucosal layer or in both and appear as benign proliferations [4]. The phases in which they are histologically classified are: proliferation of nevus melanocytes along the submucosal-mucosal junction, migration of nevus cells to the underlying mesenchymal tissue and loss of the junctional component of the nevi [5].

Melanocytes are dendritic cells that can transfer melanin to the adjacent keratinocytes, while nevus cells do not transfer melanin to adjacent keratinocytes [6]. In this case report we would like to document an oral nevus in the hard palate.

CASE REPORT

A 63-year-old female patient came to the private practice for a general check- up. The medical history reported good general health. In the central part of the palate a small black spot can be observed, not bulging, asymptomatic of about 0.2 mm in diameter (Fig-1).

The patient did not remember how long it is been present in the palate. There were not amalgam restorations in the upper arch and no type of trauma of the area is reported. A first diagnostic hypothesis of oral nevus was performed.

A biopsy of the lesion is therefore carried out with total excision (Fig-2). The analysis of the sample confirmed our diagnostic hypothesis. After a week the patient presented a complete healing of the palate.

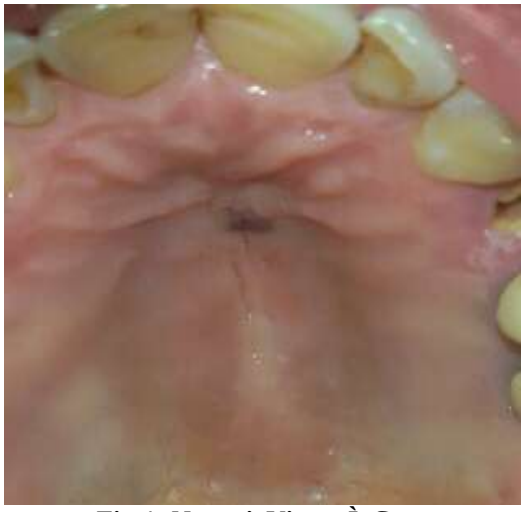

Fig-1: Nosotti, ViganoÌ, Casu

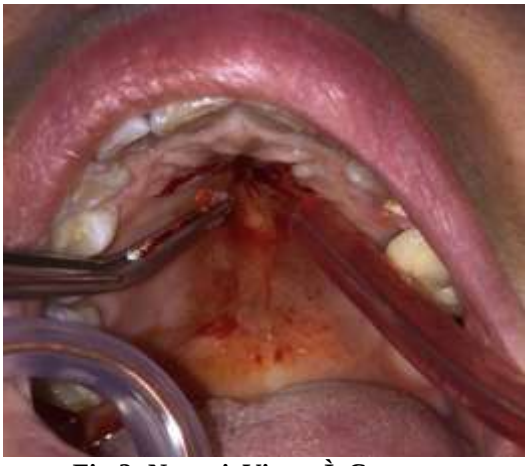

Fig-2: Nosotti, ViganoÌ, Casu.png

DISCUSSION

Melanocytes are physiologically present on the epidermis, but they are uncommon on the oral mucosa [7]. They are neural crest-derived cells and they show a dendritic morphology.

Clinically, oral nevi are small, well circumscribed macules but commonly appear as slightly raised papules [5]. They are brown, bluish-gray or black and sometimes non-pigmented. The differential diagnosis of oral melanocytic nevus includes pigmented lesions of the mouth, such as melanotic macule, physiological pigmentation, smoker's melanosis, amalgam tattoo and malignant melanoma [8].

In according to the study of Tavares T.S. at all, the cheek mucosa is the major intraoral localization (21.0%), followed by alveolar mucosa (16.6%), gingiva (11.8%) and hard palate (10.0%) [1].

From the histological point of view, the following subtypes of oral nevi are found: intramucosal (40.4%), blue nevus (23.4%), compound (21.3%), junctional (2.1%) and nevus not specified (12.8%) [1]. In the present study, the most common lesions are the amalgam tattoo (46.3%), melanotic macule (22.9%) and nevus (20.5%), while the most common types of nevi found are intramucosal (40.4%) and blue nevus (23.4%) [1].

These lesions are more common in the females than males and the mean age are 33 years old for intramucosal nevi, 40 years old for blue nevi , 6-12 years old for junction ones and 19-23 years old for compound nevi. Around 80% of the lesions are less than 1.0 cm [9].

Melanocytic nevi frequently harbour oncogenic serine/ threonine-protein kinase B-Raf (BRAF) or, less commonly, neuroblastoma RAS viral oncogene homolog (NRAS) mutations [4]. Initially oncogenic mutations might cause the hyperproliferation that resulted in the formation of the nevi, and a subsequent oncogenic-induced cellular senescence may account for the cessation of further growth [6].

Diagnosis of pigmented lesions of the oral cavity and perioral tissues is difficult, although the

clinical aspects of pigmented lesions in the oral cavity are sufficient in establishing the diagnosis, in some cases, biopsy is necessary for exclude melanoma, especially if the lesion is localized on the palate, because it has greater risk of melanoma [5].

Excision facilitates histologic sampling to exclude melanoma, and presumably, may prevent malignant transformation [10], although dysplastic changes in oral nevi are possible [4].

In according to the study of Damm at all., the desmoplastic melanocytic nevus is an uncommon type that easily may be confused with a fibrohistiocytic neoplasm or a desmoplastic melanoma [11]. Microscopically the dysplastic nevus shows architectural disorder, subepidermal fibroplasia, and lentigi- nous melanocytic hyperplasia with spindle or epithelioid melanocytes aggregating in variable sizes and fusing with adjacent rete ridges [4].

Dysplastic nevus is usually observed at puberty or adolescence, but true dysplastic nevi have been reported in children [9].

CONCLUSION

Pigmented lesions are very uncommon, therefore a hystopathological confirmation of the lesion is strongly recommended in order to be able to make a correct diagnosis, to exclude dysplastic changes and also to avoid confusing an early melanoma or any other pigmented lesion. Follow-up is also essential to exclude reccurence of oral nevi [4].

REFERENCES

1. Tavares, T. S., Meirelles, D. P., de Aguiar, M. C. F., & Caldeira, P. C. (2018). Pigmented lesions of the oral mucosa: A cross-sectional study of 458 histopathological specimens. *Oral diseases*.
2. Cardoso, L. B., Consalaro, A., da Silva Santos, P. S., da Silva Sampieri, M. B., & Tinoco-Araujo, J. E. (2014). Oral compound nevus. *Dermatology online journal*, *20*(2).
3. Júnior, H. M., Souza, P. E. A., Soares, R. V., de Andrade, B. A. B., de Almeida, O. P., & Horta, M. C. R. (2015). Oral congenital melanocytic nevus: a rare case report and review of the literature. *Head and neck pathology*, *9*(4), 481-487.
4. Gombra, V., Kaur, M., Sircar, K., & Popli, D. B. (2016). Pigmented oral compound nevus of retromolar area–A rare case report. *Singapore dental journal*, *37*, 33-35.
5. R.O. Gondak, R. da Silva-Jorge, J. Jorge, M.A. Lopes, P.A. Vargas. Oral pigmented lesions: clinicopathologic features and rewiev of the literature. Med Oral. Patol. Oral. Cir. Bucal 2012; 17(6)e919-e924.
6. Agrawal, J. (2013). Intramucosal melanotic nevi–A case report of an unusual gingival enlargement. *Journal of Indian Society of Periodontology*, *17*(2), 239.
7. Thomas, A. J., & Erickson, C. A. (2008). The making of a melanocyte: the specification of melanoblasts from the neural crest. *Pigment cell & melanoma research*, *21*(6), 598-610.
8. Meleti, M., Vescovi, P., Mooi, W. J., & van der Waal, I. (2008). Pigmented lesions of the oral mucosa and perioral tissues: a flow-chart for the diagnosis and some recommendations for the management. *Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology, and Endodontology*, *105*(5), 606-616.
9. Ferreira, L., Jham, B., Assi, R., Readinger, A., & Kessler, H. P. (2015). Oral melanocytic nevi: a clinicopathologic study of 100 cases. *Oral surgery, oral medicine, oral pathology and oral radiology*, *120*(3), 358-367.
10. Gilbert, M. L., Hanna, W., Ghazarian, D., Dover, D., & Klieb, H. B. (2011). Congenital melanocytic nevus of the oral mucosa: report of a rare pigmented lesion and review of the literature. *Clinics and practice*, *1*(1).
11. Damm, D. D., Fowler, C. B., & Schmidt, D. P. (2016). Desmoplastic melanocytic nevus of oral mucosa. *Head and neck pathology*, *10*(3), 384-388.