

## The blue nevus: two cases of palatal location

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**Abstract – Introduction:** Blue nevi are part of the spectrum of oral melanocytic nevi with a low incidence at the level of oral mucosa. **Observation:** We report two cases of blue nevi with a palatal location. **Discussion:** Blue nevi represent 23% oral nevi. The palatal location is most prevalent.

## Observation

### Case 1

A 53-year-old man (Fig. 1A) consulted us after the incidental discovery of a 5-mm papule circumscribed by a blue halo on the left hard palate adjacent to tooth 26 (Fig. 1). He had an unremarkable history, did not take any medication, and was under smoking cessation after 2 years of an estimated consumption of at 25 pack-years. There was no cervicofacial lymphadenopathy. Panoramic X-ray did not show any abnormalities. Lesion excision was performed under local anesthesia with healthy margins. Histology showed fascicle clusters of fusiform, highly pigmented melanocytes, arranged in the medium and deep soft tissue (Fig. 2A). There was no nuclear atypia or anomalous mitotic activity. Positive staining for Melan A and Ps100 confirmed the proliferation of melanocytes (Fig. 2B). The findings suggested the diagnosis of a blue nevus. Excision was complete.

### Case 2

A 60-year-old woman (Fig. 1B) with an unremarkable medical history consulted us after the recent discovery of a left palatal lesion. Clinical examination found a benign bluish macule. There was no lymphadenopathy. The excision performed under local anesthesia confirmed the diagnosis of a blue nevus. The histological findings were similar to those in the first case.

## Discussion

Oral pigmentations have several origins and can be either melanin and nonmelanin. Melanocytes are naturally arranged between keratinocytes in the basal layer of the oral epithelium, without contact between them [1]. Unlike melanin macules, which are associated with pigmentary incontinence, and lentiginos, which correspond to a proliferation of melanocytes that remain isolated, nevi are melanocytic tumors formed by

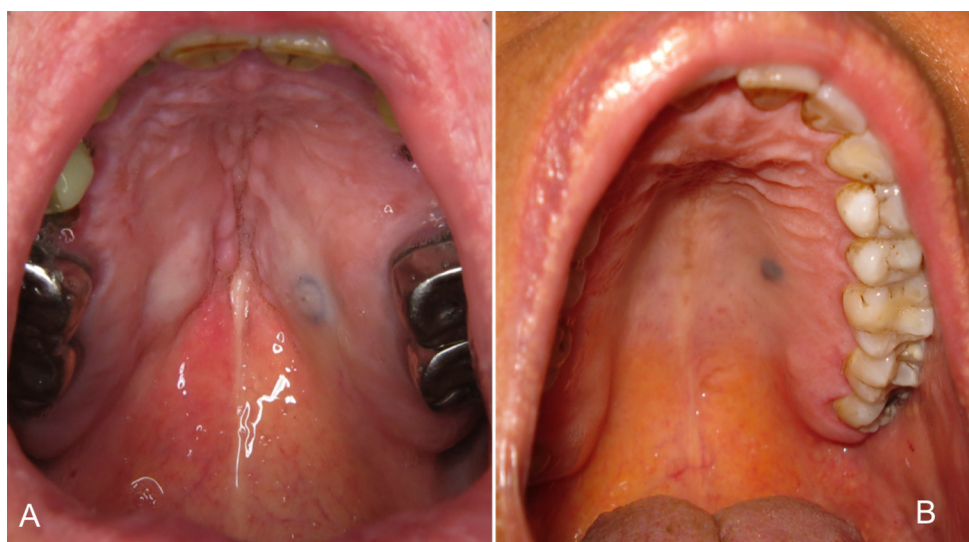
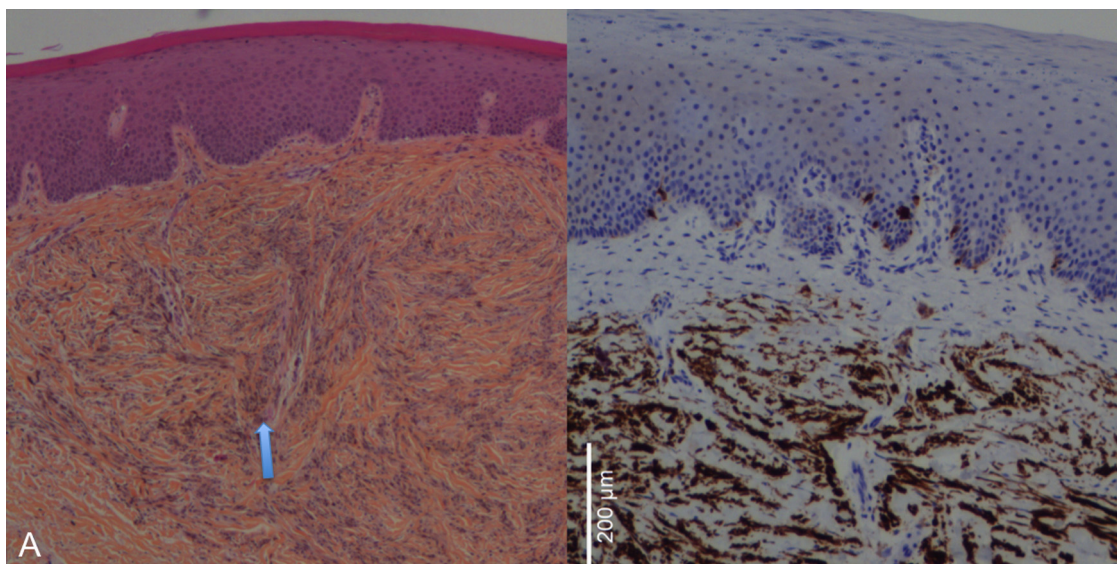


Fig. 1. Clinical images of blue nevi with a palatal location. (A) case 1 and (B) case 2.



**Fig. 2.** Histological section of the palatine mucosa in case 2. Fascicular clusters of melanocytes are located in the medium and deep soft tissue. Arrow = cluster ((A) HES  $\times 100$  and (B) protein IHC S-100  $\times 200$ ).

the proliferation of melanocytes grouped into theca cells [2,3]. The position of the melanocytic proliferation in the mucosal tissue allows the differentiation of nevi from mucous, junctional, compound, or blue nevi [2,3]. These lesions are rare in the oral cavity, where their incidence is 4 per 10 million people/year [1–3]. They develop as pigmented papules of size 0.1–3 cm, sometimes with a macular appearance [1,2]. A palatal location seems to be the most frequent [2], followed by the labial and the buccal mucosa [2,3]. Nevus color ranges from black, gray, brown, blue, to colorless (2, 4, 5), and this colorless variety is linked to greater depth of melanocytic proliferation. Blue nevi represent 23% oral nevi [2]. They show an atypical shape because the highly pigmented fusiform melanocytes are not grouped into theca cells and are arranged more deeply in the connective tissue parallel to the epithelial surface [2]. Differential diagnosis of nevi should be made with the other causes of oral mucosa pigmentation: (i) exogenous (ethnic or metal tattoo, drug pigmentation or vascular lesion); (ii) endogenous (hypermelanosis or hypermelanocytosis, whether or not related to systemic signs) [1,4]. Some nevi may be clinically atypical; therefore, it is essential to remove melanomas even if they occur as single lesions. The ABCDE criteria (A: asymmetry, B: borders, which tend to be uneven, C: color, which are nonhomogeneous, D: diameter, which tends to be large, E: evolution of the lesion) for cutaneous melanoma can also be applied to oral mucosal nevi [1]. Nevertheless, nevi

evolution to melanoma is exceptional [5]. Excision and histopathological analysis of an idiopathic, solitary lesion should be mandatory [3].

**Conflicts of interest:** The authors declare that they have no conflicts of interest in relation to this article.

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