

## Neuronevus: A clinical and dermoscopic description

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### Abstract

Neuronevus is an intradermal nevus characterized by the presence of nests of atrophic nevus cells which are hyalinized and resemble nerve bundles. To the best of our knowledge the dermoscopic findings of this entity have not been reported, Hence we present a clinical and dermoscopic description of a case of neuronevus.

**Keywords:** A clinical and dermoscopic, surface crossed, dermoscopy

### Introduction

Neuronevus is a variety of dermal nevus with neuroid aspects in its deepest part, in the form of bundles of spindle cells embedded in a conjunctival tissue of loose, wavy fibers, mimicking the appearance of a neurofibroma or simulating the structure of a Meissner tactile corpuscle. The neuronevus is thought to result from the association of nevoid cells and a schwannian component of dermal nerves. Hereby, we report a rare case of a neuronevus with clinical and dermoscopic description.

### Case report

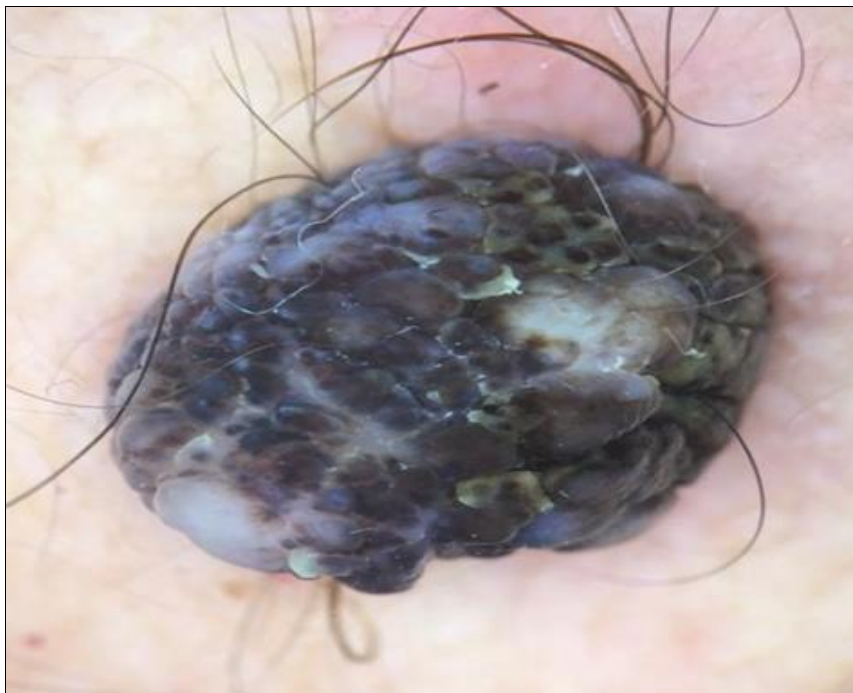
A 50-year-old woman with no significant pathological history presented with 3 years history of a growing tumor on the lateral surface of the neck.

On clinical examination, she presented with 1.5cm long, grey-black, sessile tumour with a well-limited border and a smooth, poly-lobed surface crossed by hairs. (Fig 1)



**Fig 1:** 1,5 cm sessile tumour grey-black with a well-limited border and a smooth, poly-lobed surface crossed by hairs.

The dermoscopy examination revealed: a cerebriform appearance with yellowish-white areas on a grayish-black background crossed by hairs. (Fig 2)

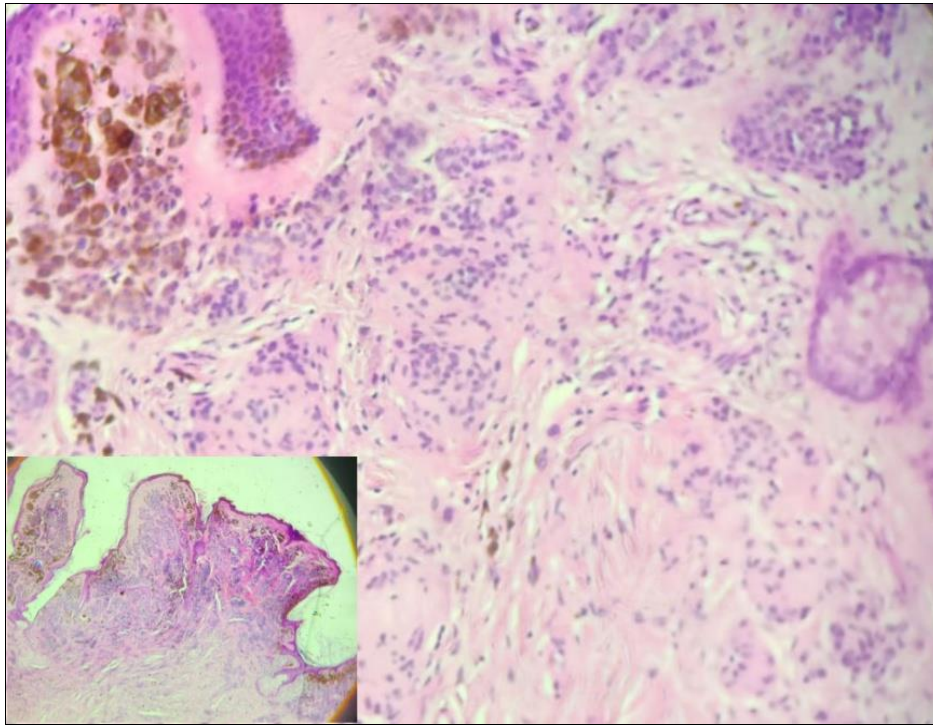


**Fig 2:** Dermoscopy (Dermlite4, polarizedlight): a cerebriform appearance with yellowish-white areas on a grayish-black background crossed by hairs.

In the face of this clinical and dermoscopic appearance, the first thought was of a blue nevus, seborrheic keratosis, melanoma or metastasis.

Surgical excision was made with histologic examination showed acanthosis of the epidermis, while the dermis is the

site of tumor proliferation in well-circumscribed nodules and thecae, made up of polygonal cells that are generally monomorphic, sometimes with pigmented cytoplasm. Deep-seated cells show extensive neuroid differentiation (Fig 3) and the diagnosis of neuronevus was established.



**Fig 3:** histological image: acanthosis of the epidermis, dermal tumor proliferation made up of polygonal cells and cells with extensive neuroid differentiation

#### Patient consent declaration

Written informed consent of this case publication was obtained.

#### Discussion

Neuronevus is an intradermal nevus characterized by the presence of nests of atrophic nevus cells which are hyalinized and resemble nerve bundles.

neuronevus remains an entity that has not been well described in the literature, but Masson has described blue neuronevus<sup>[1]</sup>. In a Chinese study by Wang H, 10 cases of neuronevus were reported in the form of a slowly progressive, painless black nodule. Pruritus was described in only 3 patients<sup>[2]</sup>.

Histologically, nests of nevus cells are found at the subepidermal level, to which vast nerve spindles are attached at depth and it is composed by dendritic melanocytes together with islands of epithelioid and plump spindle cells with abundant pale cytoplasm and usually little pigment<sup>[3]</sup>.

No specific dermoscopic signs have been described, Our case showed a cerebriform appearance with yellowish-white areas on a grayish-black background crossed by hairs.

Neither surgical procedures nor further clinical controls are needed for most cases of blue nevi, because their clinical recognition is obvious. In the presence of atypical features (e.g., recent on- set and/or recent changes, peripheral halo of inflammation, unusual dermoscopic features) surgical excision is mandatory.

**Conflicts of interest disclosures:** None

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#### References

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