Dermoscopy case of the month Dermoscopy of cellular neurothekeoma

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Dermoscopy case of the month

Dermoscopy of cellular neurothekeoma

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CLINICAL PRESENTATION

A 68-year-old woman presented with a 7-months history of an asymptomatic, slow-growing lesion on the nasal tip. The physical examination revealed a red and soft at palpation papule approximately 5 mm in diameter on the nasal tip (Fig. 1).

Fig. 1 A red and soft at palpation papule approximately 5 mm in diameter on the nasal tip.

DERMOSCOPIC APPEARANCE

Contact non-polarized dermoscopic examination found a non-specific pattern with irregular linear vessels, arborizing vessels and whitish streak areas on an erythematous-orange structureless background (Fig. 2).

Fig. 2 Contact non-polarized dermoscopic image showing arborizing vessels (black arrows), linear vessels (white arrows) and whitish streak areas (black star) on erythematous-orange structureless background (10x).

HISTOLOGIC DIAGNOSIS

The lesion consisted in a nodular dermal circumscribed proliferation, with lobular growth, uninvolving the epidermis and composed by round epithelioid cells with a vesicular nucleus, small nucleoli arranged in small nests. No mitotic features were spotted. Immunohistochemically the lesion expressed CD10, factor XIIIa, MITF and CD68 (locally). All melanocytic and neural marker performed were negative. Moreover, the lesion was negative for smooth muscle actin, EMA, CD163 and ALK. Proliferating index Ki67 was found around 2-3% (Fig. 3).

Considered the histological features, together with immunohistochemical profile, a diagnosis of cellular neurothekeoma (CN) was reached.
Fig. 3 Cellular neurothekeoma: (hematoxylin-eosin 20x) dermal proliferation of epithelioid cells in small nest with no connection to the epidermis. The neoplastic cells were positive (on the left side, from top to bottom) to CD10, MITF ad factor XIIa (fXIIIa) and negative (on the right side, from top to bottom) for Melan A, ALK and smooth muscle actin (SMA).

**KEY MESSAGE**

CN is a rare, benign, cutaneous tumour probably originating from fibroblastic cells that differentiate into myofibroblasts and recruit histiocytes [1]. It usually presents in young females as a solitary, asymptomatic, low-growing, erythematous to brownish papule or nodule on the head and neck area or on the upper extremities. Dermoscopic diagnosis is challenging and due to the characteristics arborizing vessels is often mistaken for basal cell carcinoma (BCC); differently from BCC that presents crystalline structures and shiny white streaks with polarized dermoscopy, NC is characterized by whitish structures on contact non-polarized dermoscopy, that correspond to peripheral fibrosis and fibrous septa [2]. These dermoscopic features could help physicians differentiate between these two types of tumors. The diagnosis of CN needs usually histopathological confirmation.
REFERENCES

