

Pilomatrix carcinoma of the nose: Clinical and dermoscopic presentation



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Abbreviation used:

PC: pilomatrix carcinoma

CLINICAL PRESENTATION

A 69-year-old man presented with a smooth dome-shaped reddish nodule, 1.4 cm in diameter, which had rapidly arisen on the nose over the previous 3 months (Fig 1).



Fig 1. Pilomatrix carcinoma. Clinical presentation: a red fast-growing nodule on the dorsum of the nose.

DERMOSCOPIC APPEARANCE

Dermoscopy found a prevalent vascular pattern characterized by arborized vessels surmounting the lesion. Homogeneous structureless purple/blue areas covered most of the surface. Blotches of various sizes were asymmetrically distributed: the largest presented a white central portion and a yellowish color in the periphery, the smaller ones showed shades of yellow/orange (Fig 2).

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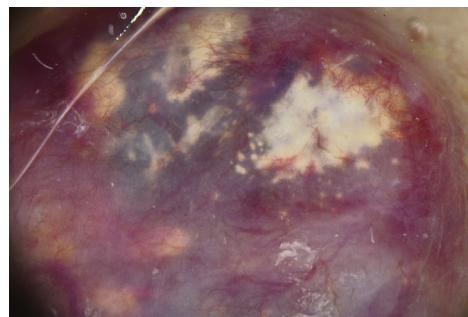


Fig 2. Pilomatrix carcinoma. Dermoscopic presentation: white-yellowish blotches, surrounded by homogeneous structureless purple/blue areas and surmounted by a predominant arborizing vascular pattern.

HISTOLOGIC DIAGNOSIS

The lesion was excised. Histology found an expansile growth of variously sized aggregations of basaloid cells with high mitotic activity surrounded by desmoplastic stroma. Foci of cornified material containing shadow cells were observed within the aggregations of basaloid cells, along with geographical necrosis (Fig 3). Pilomatrix carcinoma (PC) was diagnosed.

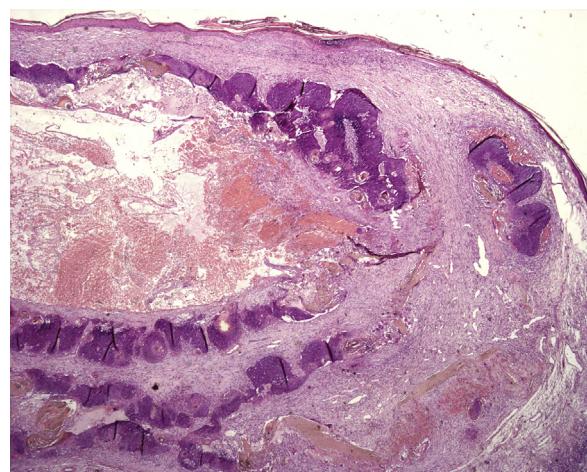


Fig 3. Pilomatrix carcinoma. Histopathology: asymmetrical, poorly circumscribed dermal-subcutaneous tumor composed of aggregations of basaloid cells surrounded by desmoplastic stroma. In the center, a large mass of shadow cells is present. (Hematoxylin-eosin stain; original magnification: $\times 2$.)

KEY MESSAGE

PC is a rare dermo-hypodermic neoplasm originating from the hair matrix. PC should be suspected in rapidly growing nodular lesions, arising in the head and neck region, presenting simultaneously white-yellowish blotches and arborizing vascular structures. White-yellowish blotches are observed in both PC and benign pilomatricoma because of the presence of calcifications/cornified material. On the contrary, arborizing vessels have never been detected in pilomatricoma (Fig 4). They also differ from the branched arborizing vessels of basal cell carcinoma, extending superficially without interruption and creating an unfocused network covering the entire surface. The excision of doubtful lesions is mandatory especially in adults, because PC is locally aggressive with a tendency to metastasize.



Fig 4. Pilomatricoma. Dermoscopic presentation shows white-yellowish blotches covered by a pale scale on a pink background with glomerular and hairpin vessels. A hemorrhage spot with reddish globules can be observed in the periphery.