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Challenging Cases

Adnexal Tumours: The Unconditional Help of Dermoscopy

Case reports

Case report #1

A skin-colored papule located on the left scapular region, previously unnoticed and of uncertain duration, in a 45-year-old woman (Fig. 1A). Dermoscopic examination revealed fine, well-focused telangiectasias traversing the lesion on a pink-whitish background (Fig. 1B). The lesion was surrounded by a pigment network, consistent with its location in an area of intense actinic damage. With an initial suspicion of basal cell carcinoma, a skin biopsy was performed, which confirmed the diagnosis (Fig. 1C).

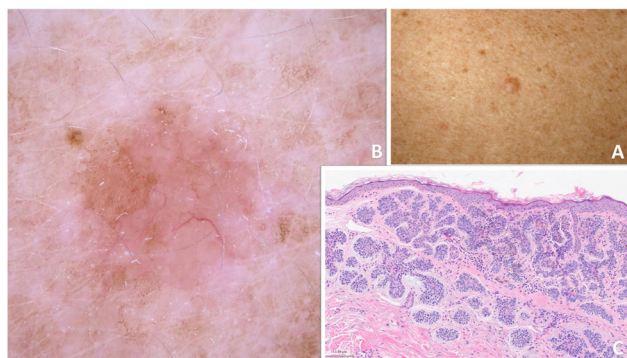


Fig. 1.

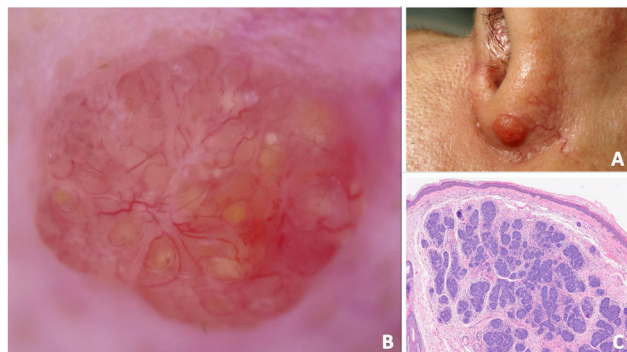


Fig. 2.

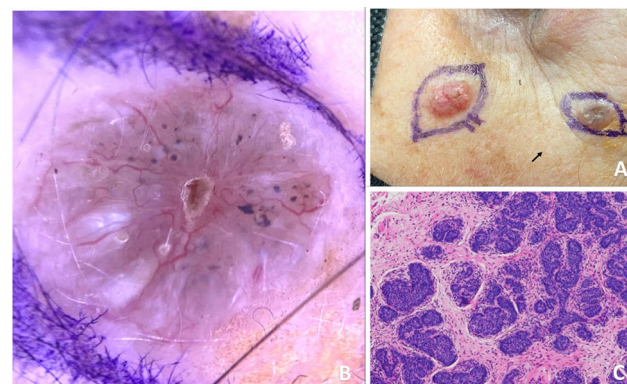


Fig. 3.

Case report #2

This is the case of a several-year history of an erythematous papule on the left nasal ala in a 60-year-old woman, with rapid growth in recent months (Fig. 2A). Dermoscopy revealed the presence of short, fine vessels and focused telangiectasias, along with rosettes and white-yellow globules corresponding to milia-like cysts (Fig. 2B). Histopathologic findings are shown in Fig. 2C.

Case report #3

With clinical suspicion of a 2nd basal cell carcinoma, excision was performed on a recently appearing lesion on the left temple, associated with the growth of another immediately inferior lesion with occasional bleeding consistent with basal cell carcinoma (Fig. 3A). Dermoscopy demonstrated blue-gray dots and globules, focused telangiectasias and fine branching vessels, shiny white structures, and a central erosion over a blue-gray background (Fig. 3B). Histopathologic examination established the definitive diagnosis (Fig. 3C).

What is your diagnosis?

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Diagnosis

Case report #1

Desmoplastic trichoepithelioma.

Case report #2

Trichoepithelioma.

Case report #3

Trichoblastoma.

Comments

Cutaneous adnexal tumors include a diverse group of neoplasms arising from follicular or glandular skin structures.¹ This group includes hamartomas as well as benign and malignant neoplasms, and they often pose a diagnostic challenge when differentiating them – clinically and histologically – from basal cell carcinoma (BCC), the most common malignant skin tumor.^{1–3}

Trichoblastomas (TBs) are benign neoplasms with follicular differentiation arising from follicular germinative cells.² There is controversy as to whether trichoepitheliomas (TEs) – including the desmoplastic variant (DTE) – represent histopathologic variants of TB or whether they constitute independent entities.^{1,3}

As with other adnexal tumors, although the definitive diagnosis is histopathologic, several dermoscopic criteria have been proposed to aid in distinguishing TB/TE from BCC.^{3–6}

TB usually presents as a solitary lesion and may occur anywhere except on non-hair-bearing skin, with a predilection for the face and scalp.^{1,2} Occasionally, TB may present as multiple lesions, be associated with other syndromes,³ or arise within a nevus sebaceus, where it is the most frequent associated neoplasm.⁴

TE shares similar clinical and epidemiologic characteristics and is notable for its desmoplastic histopathologic variant.^{2,4} Histologically, TB and TE are similar; however, some authors consider TE to represent the superficial variant of TB due to the location of its proliferative component.¹

They differ from BCC in the presence of nests or islands of basaloid cells forming a well-circumscribed, symmetric tumor with vertical growth, surrounded by a loose stroma that separates them from the adjacent dermis. Retraction occurs between the stroma and surrounding dermis – unlike BCC, in which retraction is seen between the tumor and stroma and peripheral palisading is typically present.^{1–3,6}

Dermoscopic criteria have been defined to help distinguish these tumors from BCC and from one another (TB/TE/DTE).^{3–7}

In TE, various vascular patterns may be seen; the most common consists of small unfocused vessels, although fine and short arborizing vessels may also be present, resembling BCC.^{3,6,7} When the lesion is non-pigmented, these vessels appear over a white-pink background which, in the case of DTE, may show a whiter, “ivory-like” marbled appearance (Fig. 1B), sometimes with central umbilication. White-yellow globules representing milia-like cysts (Fig. 2B) and even rosettes are a common finding.^{6,7}

TB, however, more commonly shows vessels similar to those of BCC, although punctate and glomerular vessels have been described in the adamantinoid variant.^{1,2} A characteristic feature of TB is its pigmented variant: a solitary blue-gray background (described as a “large blue-gray ovoid nest”), often accompanied by blue-gray dots and globules (Fig. 3B).⁶

This helps differentiate it from pigmented BCC, in which ovoid nests are generally multiple and smaller, contributing to clinical pigmentation but not typically forming a uniform pigmented background on dermoscopy.^{6,7}

The definition of these dermoscopic structures has been guided by histopathologic correlation.⁸ Pigmented structures correspond to basaloid cell nests containing pigment; shiny white structures and “ivory-like” backgrounds correspond to dense, altered collagen in the abundant stroma of these tumors; and white globules/pseudocysts correspond to cystic structures such as milia-like cysts.


Therefore, although histopathology remains the diagnostic gold standard, dermoscopy significantly improves the ability to distinguish trichoblastic tumors from BCC and supports characterization of the different subtypes (TB/TE/DTE).^{1,4,6,7}

Conflict of interest

The authors declare no conflict of interest.

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L.M. Nieto-Benito ^{a,*}, M. Garrido-Ruiz^b, M. Huerta-Brogeras^a, A. Tomás-Velázquez^a, P. Redondo-Ballón^a

^a Departamento de Dermatología, Clínica Universidad de Navarra, Madrid, Spain

^b Departamento de Dermatopatología, Clínica Universidad de Navarra, Madrid, Spain

* Corresponding author.

E-mail address: lula.m.nieto@gmail.com (L.M. Nieto-Benito).