



Challenging Cases

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6 Adnexal Tumours: The Unconditional Help of 8 Dermoscopy

9 Case reports

10 Case report #1

Q2 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).

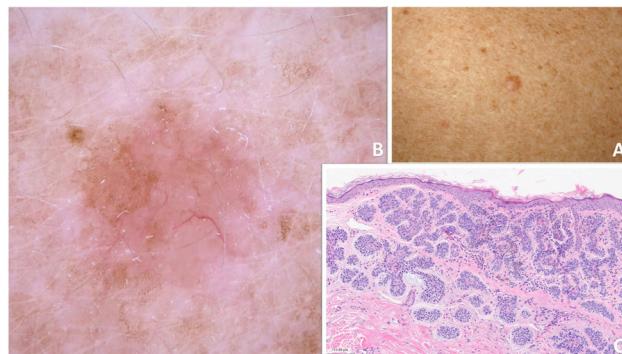


Fig. 1.

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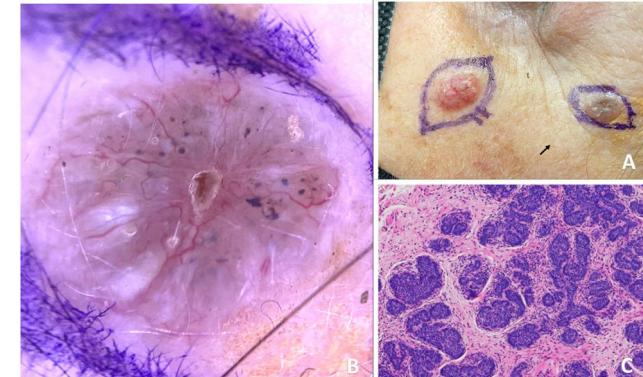


Fig. 3.

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?



Fig. 2.

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35 **Diagnosis**36 **Case report #1**

37 Desmoplastic trichoepithelioma.

38 **Case report #2**

39 Trichoepithelioma.

40 **Case report #3**

41 Trichoblastoma.

42 **Comments**

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

49 Trichoblastomas (TBs) are benign neoplasms with follicular differentiation
 50 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
 53 constitute independent entities.^{1,3}

54 As with other adnexal tumors, although the definitive diagnosis is
 55 histopathologic, several dermoscopic criteria have been proposed to aid in
 56 distinguishing TB/TE from BCC.³⁻⁶

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

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

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

73 Dermoscopic criteria have been defined to help distinguish these
 74 tumors from BCC and from one another (TB/TE/DTE).³⁻⁷

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

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

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

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

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

Conflict of interest

The authors declare no conflict of interest.

References

1. Danialan R, Mutymbizi K, Aung P, Prieto VG, Ivan D. Challenges in the diagnosis of cutaneous adnexal tumours. *J Clin Pathol*. 2015;68:992–1002, <http://dx.doi.org/10.1136/jclinpath-2015-203228>.
2. Śląwińska M, Płaszczyńska A, Lakomy J, et al. Significance of dermoscopy in association with clinical features in differentiation of basal cell carcinoma and benign trichoblastic tumours. *Cancers (Basel)*. 2022;14:3964, <http://dx.doi.org/10.3390/cancers14163964>.
3. Navarrete-Dechart C, Bajaj S, Marghoob AA, González S, Muñoz D. Multiple familial trichoepithelioma: confirmation via dermoscopy. *Dermatol Pract Concept*. 2016;6:51–54, <http://dx.doi.org/10.5826/dpc.0603a10>.
4. Zaballos P, Gómez-Martín I, Martín JM, Bañuls J. Dermoscopy of adnexal tumors. *Dermatol Clin*. 2018;36:397–412, <http://dx.doi.org/10.1016/j.det.2018.05.007>.
5. Zaballos P, Serrano P, Flores G, et al. Dermoscopy of tumours arising in naevus sebaceous: a morphological study of 58 cases. *JEADV*. 2015;29:2231–2237, <http://dx.doi.org/10.1111/jdv.13226>.
6. Lai M, Muscianese M, Piana S, et al. Dermoscopy of cutaneous adnexal tumours: a systematic review of the literature. *JEADV*. 2022;36:1524–1540, <http://dx.doi.org/10.1111/jdv.18210>.
7. Longo C, Lippolis N, Lai M, et al. Dermoscopic features of trichoepithelioma: a multicentre observational case-control study conducted by the International Dermoscopy Society. *JEADV*. 2023;37:e1253–e1255, <http://dx.doi.org/10.1111/jdv.19262>.
8. Huet P, Barnéon G, Cribier B. Trichoblastoma: corrélation dermatopathologie-dermatoscopie. *Ann Dermatol Venereol*. 2017;144:462–465.

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