Desmoplastic trichoepithelioma and melanocytic nevus: Dermoscopic and reflectance confocal microscopy presentation of a rare collision tumor

André Oliveira, MD,a Edith Arzberger, MD,b Iris Zalaudek, MD,b and Rainer Hofmann-Wellenhof, MDb

Lisbon, Portugal, and Graz, Austria

CLINICAL PRESENTATION

A 27-year-old woman presented with a 2-year history of an asymptomatic papule located on her right cheek. The physical examination revealed a firm, well-defined with a raised annular border, skin-colored papule, 5 mm in maximum diameter.

DERMOSCOPIC APPEARANCE

Sharply focused, fine arborizing vessels, mostly at the periphery, were observed on a white-ivory background in the upper half of the lesion and structureless light-brown vessels were observed in the lower half. Few white clods, probably corresponding to horn cysts, were also seen (Fig 1).

CONFOCAL MICROSCOPY APPEARANCE

Dark, small, round, and elongated tumor islands were seen in the superficial dermis. Within these structures, round, small black spaces were filled with highly refractile material (early horn cysts). Brightly refractile collagen arranged in parallel bundles was seen surrounding the tumor islands and also some dilated vessels throughout the stroma. Compact, larger, ovoid, highly refractile structures were seen within a few tumor islands, representing focus of tumor calcification. At the dermo-epidermal junction, a meshwork pattern with edged papillae, junctional thickenings, and nests were observed (Fig 2).

Fig 1. Desmoplastic trichoepithelioma and melanocytic nevus (collision tumor). Dermoscopy of the skin-colored papule on the right cheek (clinical detail) disclosed sharply focused, fine arborizing vessels (arrows), mostly at the periphery on a white-ivory background (black asterisk) in the upper half of the lesion and structureless light-brown (white asterisk) in the lower half. Few white clods (arrowheads) probably corresponding to horn cysts were also seen. There were no leaflike structures, ovoid nests, or shiny-white streaks.

From the Department of Dermatology, Hospital de Curry Cabral — Centro Hospitalar de Lisboa Central,a Lisboa, Portugal, and the Department of Dermatology, Medical University of Graz, Graz, Austria,b

Publication of this article was supported by 3Gen.

Funding sources: None.

Conflicts of interest: None declared.
HISTOLOGIC DIAGNOSIS
Histopathologic examination confirmed a collision tumor between a desmoplastic trichoepithelioma (DTE) with focus of calcification and a melanocytic nevus (Fig 3).
KEY MESSAGE
DTE is a benign adnexal tumor. Although rare, typical clinical, dermoscopic, and reflectance confocal microscopy features of DTE were seen here with an associated melanocytic nevus.1 To our knowledge, this is the first report of dermoscopic and reflectance confocal microscopy presentation of this rare collision tumor, supporting the role of these noninvasive techniques as an aid to its histopathologic diagnosis.2

REFERENCES