Dermoscopic and reflectance confocal microscope findings of trichoepithelioma.


ABSTRACT

BACKGROUND: Trichoepitheliomas (TE) are benign neoplasms of follicular differentiation. Solitary lesions are often confused with basal cell carcinoma (BCC). Reflectance confocal microscopy (RCM) and dermoscopy are imaging tools for in vivo, noninvasive evaluation of skin lesions. To date, there has been no description of their findings in the evaluation of TE.

OBJECTIVE: Our aim is to describe the dermoscopic and RCM findings of histopathologically confirmed TE.

METHODS: Four TE were evaluated, 2 each of the desmoplastic and nondesmoplastic variants. RCM was performed on 1 of the desmoplastic and both of the nondesmoplastic lesions.

RESULTS: Dermoscopically, all of the lesions showed arborizing telangiectasias. The desmoplastic lesions also had an ivory-white background throughout. RCM showed oval, darker-appearing tumor islands that contained brightly refractile material, consistent with keratin horn cysts at the center, as well as parallel bundles of highly refractile dermal collagen surrounding the tumor islands.

CONCLUSION: The ivory-white background throughout the lesion seen on dermoscopy may be helpful in distinguishing desmoplastic TE from BCC. The RCM findings in TE of keratin-filled cysts in tumor islands and attachment of the tumor to follicular structures have not been previously observed in BCC, and thus may also be diagnostically helpful. Further study is necessary for validation of these findings.