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Dermatoscopic pattern of a cylindroma

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Case report

A 65-year-old man presented with an asymptomatic lesion on the left parietal scalp of 6 months' duration. Three years prior, a cylindroma on the same area was excised by a general surgeon. Physical examination revealed a solitary 6 mm salmon-pink, firm, dome-shaped papule on the left parietal scalp (Figure 1). Dermatoscopic evaluation showed arborizing telangiectasia and several scattered white globules on a white to salmon pink background (Figure 2). The lesion was excised for pathologic evaluation. Histologic evaluation shows multiple irregular lobules in a jigsaw-mosaic pattern diagnostic of cylindroma (Figures 3 and 4).

Discussion

Cylindromas are slowly growing benign adnexal tumors that occur most commonly on the head, neck, and scalp. They can occur as solitary or multiple tumors. While solitary cylindroma are sporadic and not inherited, multiple cylindromas occur in the autosomal dominant Brook-Spiegler syndrome (familial autosomal dominant cylindromatosis) [1,3].

There are currently only a few case reports of the dermatoscopic features of cylindroma in the medical literature. The



Figure 1. Clinical view of the cylindroma on the left parietal scalp. [Copyright: ©2014 Cohen et al.]

reported patterns of cylindroma include arborizing vessels on a whitish-pinkish background, blue dots and globules, and ulceration [2,4,5]. Our observations revealed arborizing telangiectasia and several scattered white globules on a white to salmon-pink background, which are similar to the previous reports. At this time, we are not certain if white globules



Figure 2. Dermatoscopic view shows several scattered white globules and arborizing telangiectasia on a white to salmon pink background. The vascular branches are more pronounced at the periphery and they extend from the periphery towards the center of the lesion. [Copyright: ©2014 Cohen et al.]



Figure 3. Well-circumscribed, non-encapsulated nodule in the dermis. There are multiple lobules arranged in a jigsaw-mosaic pattern. [Copyright: ©2014 Cohen et al.]

are reproducible dermoscopic findings. Further studies will be needed.

However, an interesting observation of the vascular pattern of our patient's cylindroma suggests that the vascular branches are more pronounced at the periphery [2] and that they extend from the periphery towards the center of



Figure 4. Each lobule consists of two layers of cells; an outer layer of cells with small hyperchromatic nuclei and an inner section of cells with oval vesicular nuclei. Each lobule is outlined by a dense PAS-positive hyaline membrane. [Copyright: ©2014 Cohen et al.]

the lesion. This feature may help differentiate cylindroma's arborizing vessels from those of nodular basal cell carcinoma, which tend to be more pronounced at the center and do not have a particular pattern. More studies are essential to establish the definite dermatoscopic patterns of cylindroma.

While most cylindromas are benign, there have been reports of solitary cylindromas undergoing malignant transformation, especially in tumors of the scalp present for long duration [3]. Therefore, early diagnosis and management can offer patients the best possibility of cure. It is our hope that these observations may aid in the early diagnosis of cylindroma and help to differentiate them from malignant tumors.

References

- Calonje E, Brenn T, Lazar A, et al. *McKee's Pathology of the Skin*. 4th ed. New York: Saunders, 2012.
- 2. Lallas A, Apalla Z, Tzellos T, Lefaki I. Dermoscopy of solitary cylindroma. Eur J Dermatol. 2011;21(4):645-6.
- 3. Bansal C, Batra M, Lal N, Srivastava AN. Cylindroma with malignant transformation. Indian J Dermatol. 2012;57(2):141-143.
- Cabo H, Pedrini F, Cohen Sabban E. Dermoscopy of cylindroma. Dermatol Res Pract. 2010; 2010:285392.
- Jarrett R, Walker L, Bowling J. Dermoscopy of Brooke-Spiegler syndrome. Arch Dermatol. 2009;145(7):854.