

Dermoscopy, Optical Coherence Tomography, and Histological Correlation of Pseudoxanthoma Elasticum

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Case Presentation

We propose the case of a 17-year-old female patient with multiple, soft, yellowish papules symmetrically distributed on the neck (Figure 1A). Dermoscopy showed a yellowish orange area associated with reddish and whitish areas [1] (Figure 1B). Optical coherence tomography (OCT) revealed normal epidermis associated with clusters of horizontally oriented dermal aggregates with peripheral clefts (Figure 1C). A biopsy was performed in the same site of previous noninvasive imaging techniques. Histology disclosed the presence of altered elastic fibers in the upper and reticular dermis with extension to the papillary dermis stained with hematoxylin and eosin (Figure 1D). Pseudoxanthoma elasticum (PXE) is a rare disorder concerning elastolytic fibers due to a genetic mutation, with systemic alterations as mainly cardiac and

ophthalmological complications due to abnormalities of elastic fibers.

Teaching Point

We believe that this is the first report of PXE with dermoscopy correlated to OCT and histology. OCT may be useful for PXE confirmation showing specific dermal features.

Reference

1. Nasca MR, Lacarubba F, Caltabiano R, Verzi AE, Micali G. Perforating pseudoxanthoma elasticum with secondary elastosis perforans serpiginosa-like changes: dermoscopy, confocal microscopy and histopathological correlation. *J Cutan Pathol*. 2016;43(11):1021-1024.

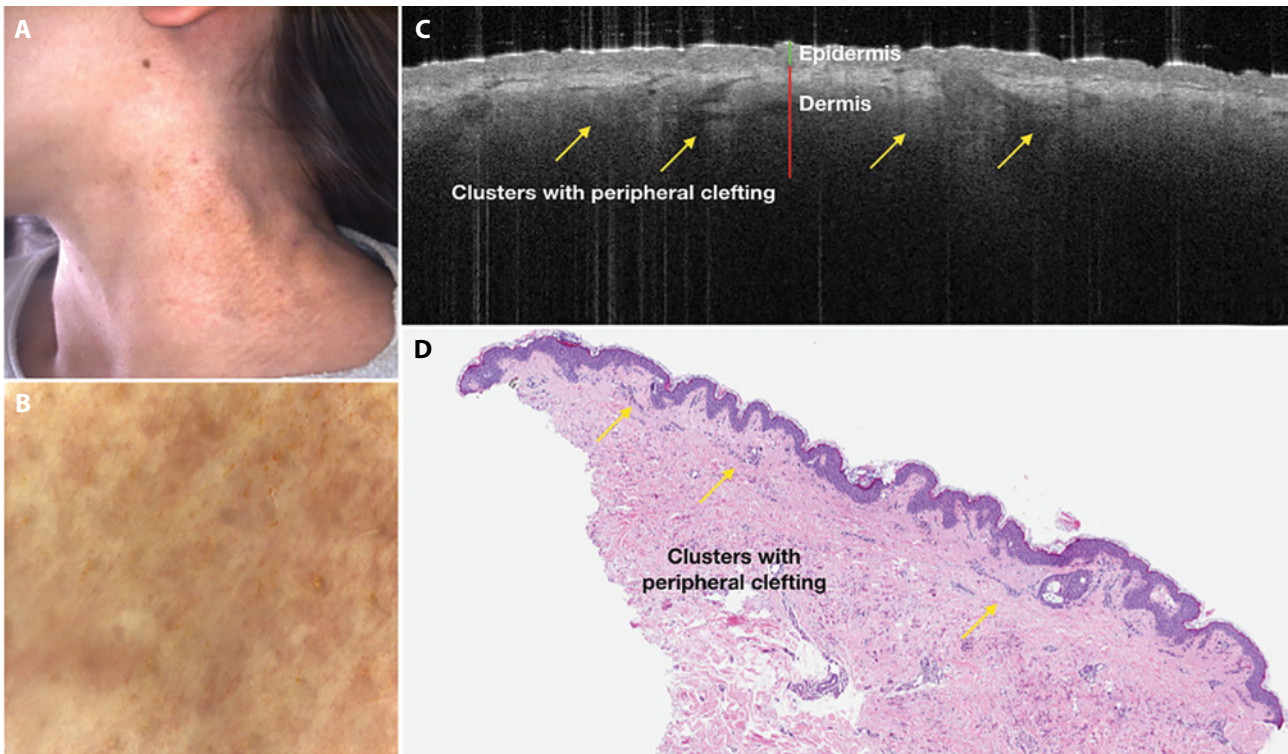


Figure 1. (A) Clinical photograph of PXE. (B) Dermoscopy of PXE. (C) OCT revealed normal epidermis associated with clusters of horizontally oriented dermal aggregates with peripheral clefts. (D) Histology disclosed the presence of altered elastic fibers in the upper and reticular dermis with extension to the papillary dermis stained with hematoxylin and eosin. [Copyright: ©2019 Persechino et al.]