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In Vivo Confocal Microscopic Pattern of Fibroepithelioma of Pinkus

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In vivo confocal microscopy was used to visualize 8 cases of fibroepithelioma of Pinkus (FeP). Dermoscopically, there were 5 hypopigmented cases that were characterized by white intersecting lines associated with a vascular pattern and 3 pigmented cases that showed ulceration, patchy hypopigmented and hyperpigmented areas, and dark-brown dots.

In all cases, in vivo confocal microscopy revealed a distinct architecture that was visible at the level of the dermoepidermal junction. The hallmark of FeP was a fenestrated pattern constituted by "holes" that corresponded to the fibrous stroma (**Figure**, A and B [asterisks]), which was outlined by the tumoral islands or cords (the "frame" of the holes) (Figure, A and B, top [arrows]) that were particularly evident in hypopigmented FeP (Figure, A). Histopathologic examination revealed that both hypopigmented and pigmented lesions were characterized by tumor islands and anastomosing strands of basaloid cells (Figure, A and B, top [arrows]), usually with palisading at the periphery, surrounding a fibrous stroma (Figure, A and B, top [asterisks]). In pigmented lesions, a variable amount of plump, bright cells (Figure, C, bottom [arrows]) corresponding to melanin-laden macrophages (Figure, C, top [arrow]) were also present. Histopathologically, all tumors demonstrated strands of basaloid keratinocytes located within an overwhelmingly fibrous stroma.

In sum, in vivo confocal microscopy makes it possible to diagnose FeP with a greater level of confidence because it reveals cords with palisading cells, which are characteristic of basal cell carcinoma, although they arranged in a peculiar fenestrated pattern that corresponds well with the histopathologic features.

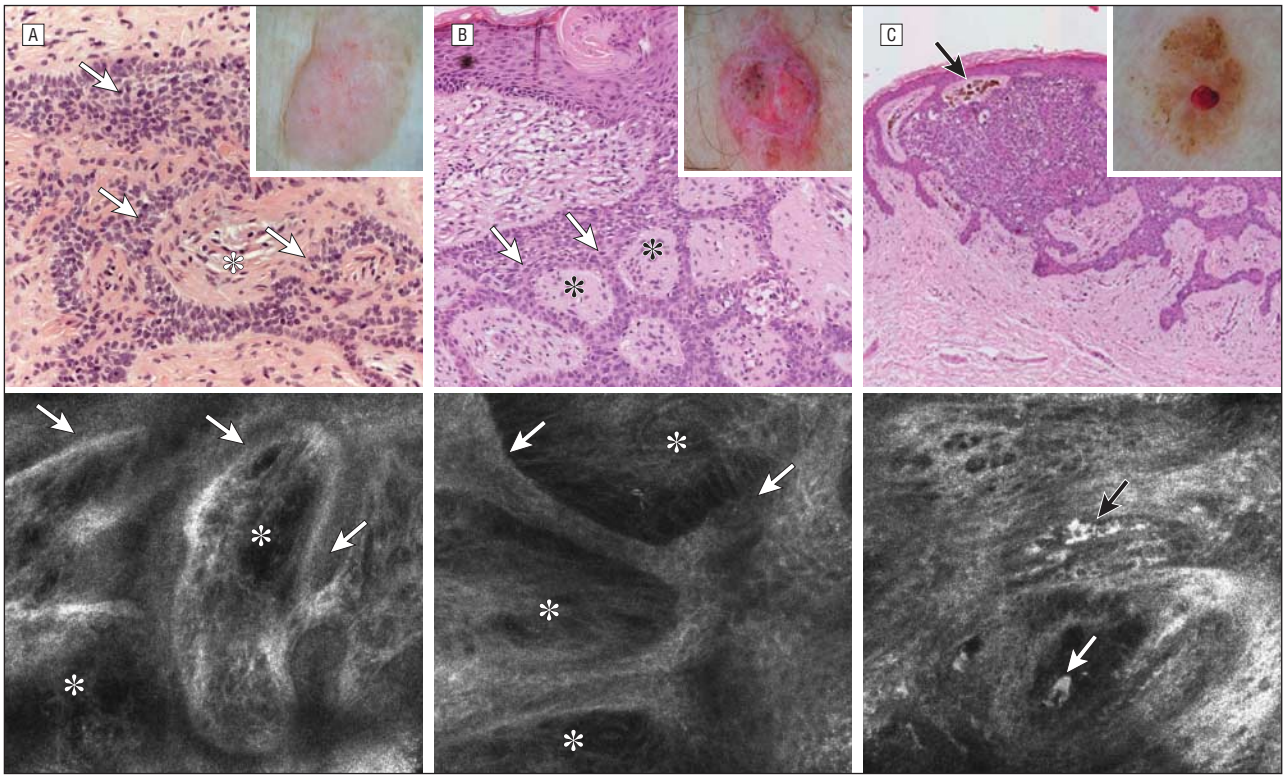

Figure.