

# Reflectance confocal microscopic findings of a tiny syringocystadenoma papilliferum



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**Key words:** dermoscopy; in vivo reflectance confocal microscopy; syringocystadenoma papilliferum.

## CLINICAL PRESENTATION

A 43-year-old man with Fitzpatrick skin type III presented to our clinic with an asymptomatic lesion on the left ear that had been present for a few months. The physical examination revealed an umbilicated grayish papule that was 3 mm × 2 mm in diameter (Fig 1, A).

## DERMOSCOPIC APPEARANCE

On dermoscopy, a polymorphic vascular pattern with mostly linear, some hairpin-like thin vessels were seen. These were arranged from the periphery to the central part on a pinkish-grayish background.

In addition, an obvious central yellowish area and a small hemorrhagic area at the periphery were observed (Fig 1, B).

## CONFOCAL MICROSCOPY APPEARANCE

On in vivo reflectance confocal microscopy (RCM) (Vivascope 3000 Handheld; Mavig GmbH, Munich, Germany), a honeycomb pattern was seen at the epidermal level. There were no atypical cells. The dermoepidermal junction was visible in focal areas. In VivaStack imaging, we observed some dark spaces that were roundish at the superficial levels and turned bizarre and then linear at deeper levels



**Fig 1.** A, Clinical images of the grayish papular lesion on the left ear. B, Dermoscopic image. A yellowish area at the center and polymorphic vascular structures at the periphery together with a small hemorrhagic area.

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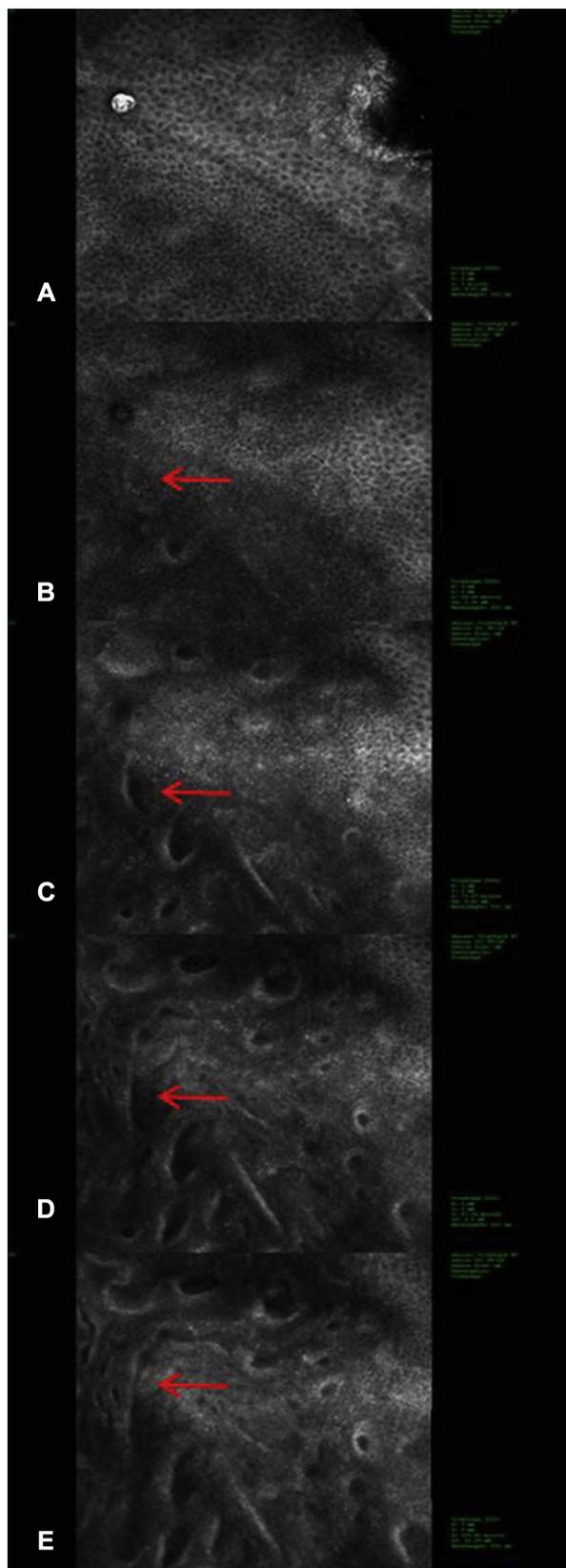
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**Fig 2.** Five sequential images of a VivaStack movie. **A**, Honeycomb pattern. **B-E**, The roundish dark spaces are becoming linear clefts (*red arrows*), going down from the epidermis to the dermal area.

(Fig 2). There were grayish epithelial islands with papillary configuration within or around these dark clefts (Fig 3).

### HISTOLOGIC DIAGNOSIS

On histopathology, the lesion was composed of invaginations from the surface epithelium into the dermis. These were lined by double-layered cuboidal and squamoid epithelium with multiple papillary structures. A mild lymphoplasmocytic infiltration was seen at the base of the lesion (Fig 4). The lesion was diagnosed as syringocystadenoma papilliferum (SCAP) with these findings.

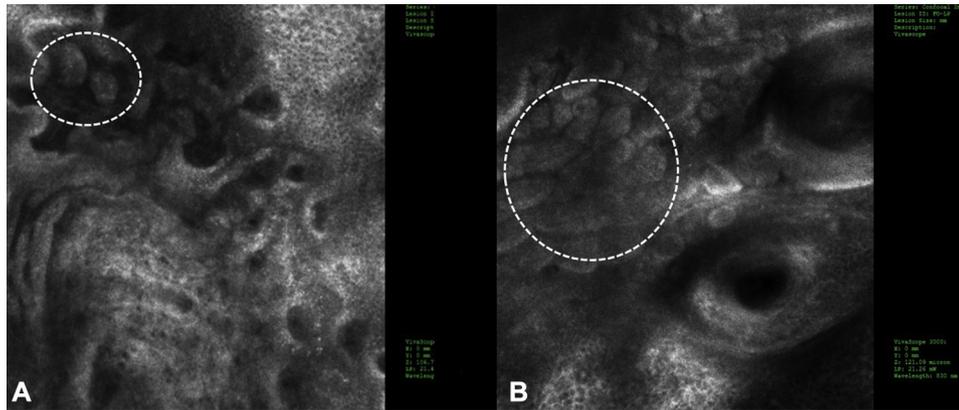
### KEY MESSAGE

SCAP is a rare benign adnexal tumor that usually appears during childhood. It is histopathologically characterized by duct-like structures that extend as invaginations from the surface epithelium into the underlying dermis. These ducts generally connect to the surface and contain multiple protruding papillary structures with diverse size and shape.

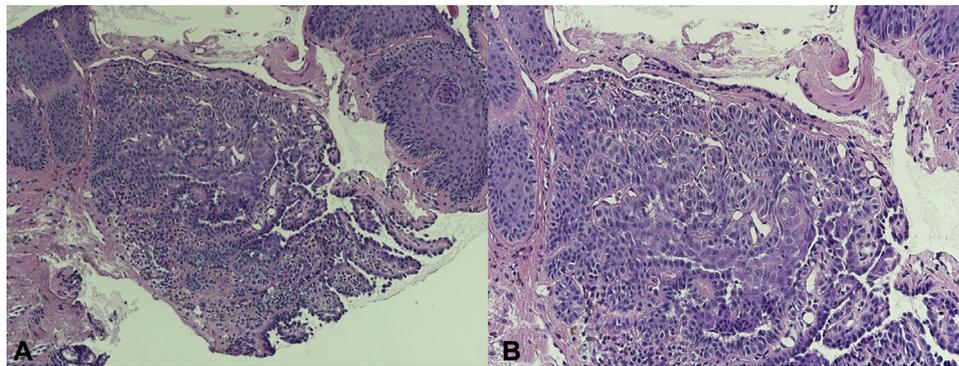
The reports describing the dermoscopic features of SCAP are limited in the published literature.<sup>1-5</sup> In these cases, SCAP lesions were mostly associated with nevus sebaceous<sup>2-5</sup> except 1 case of linear SCAP.<sup>1</sup> The dermoscopic features of SCAP described in those reports were exophytic papillary structures with central depression/erosion/crust/ulceration and vascular structures (hairpin, polymorphous, or comma vessels) on a milky red or erythematous background. We observed a polymorphic vascular pattern on a pinkish-grayish background with a central yellowish area in this solitary papular form of SCAP.

To our knowledge, RCM features of SCAP have not been described previously. We observed RCM features as “dark linear clefts” and “grayish epithelial islands” within or around dark clefts. The dark linear clefts correlate well with the characteristic histopathologic feature of SCAP seen as invaginations extending from the surface epithelium into the underlying dermis. These invaginations connect to the surface of the lesion which was also seen in VivaStack imaging. The grayish islands also correlate well with the characteristic papillary structures on histology.

As a result, RCM findings seem to be representative for SCAP in this case. However, these findings need to be evaluated in additional cases for their diagnostic significance.



**Fig 3.** **A** and **B**, Grayish epithelial islands with papillary configuration (*white circles*) within dark clefts.



**Fig 4.** **A** and **B**, Double layered cuboidal and squamoid epithelium with multiple papillary structures with some inflammatory cells. (Hematoxylin–eosin stain; original magnifications: *A*,  $\times 40$ ; *B*,  $\times 100$ .)

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