To the Editor: Seborrheic keratosis (SK) is one of the most common benign skin tumors in clinic. Due to the wide variation in its clinical features, however, and particularly when both its manifestations and dermoscopic findings of its lesion are atypical, it may be challenging to differentiate SK lesions from other benign or malignant skin tumors.[1,2] We here report a case of SK of an adenoid type that initially imitated pigmented basal cell carcinoma (BCC) upon dermoscopy.

A 49-year-old female patient presented with a 2-year history of a single, slowly growing papule on her right arm with occasional itching. Physical examination revealed a 4 mm × 5 mm rough, slightly hard, oval brown papule with central erosion [Figure 1A]. Subsequent dermoscopy (CBS-908; CBS Inc., Wuhan, China) revealed an ulcer and hairpin vessels in the center of the lesion, with surrounding blue-gray globules and leaf-like areas at the edge [Figure 1B]. Most of the dermoscopic findings, especially the pigmented structures without pigment network, were consistent with a diagnosis of pigmented BCC.

Histopathologically, the lesion in our patient showed acanthosis and thin proliferating strands of basaloid cells arising from the epidermis and twisting in the dermis [Figure 1C]. The stratum corneum was missing in the middle of the lesion, whilst pseudohorn cysts were present in the epidermis. The epithelium showed hyperpigmentation and also some pigment deposition and inflammatory cells infiltration in the superficial dermis. Based on these findings, we made a final diagnosis of an adenoid type of SK, rather than a pigmented BCC.

The dermoscopic features of an adenoid SK have not been previously reported, and the most typical dermoscopic findings of SK such as comedo-like openings, cerebriform pattern, and milia-like cysts were not clearly visible in our present case.[3] At the same time, the SK lesion in our current patient also showed no typical dermoscopic features of other epidermal hyperplastic tumors, such as Bowen’s disease (ie, glomerular vessels and scaly surface) or keratoacanthoma (such as keratin crust, white circles, or dot vessels).[4] Notably, this patient has previously stated that the lesion was occasionally itchy, suggesting that the central erosion surface may have been caused by recent irregular scratching. Irritation or prior trauma may also render dermoscopic findings atypical that make it difficult to differentiate from other tumors.[5]

In terms of dermoscopic details, it is noteworthy in the first instance that erosion occurred instead of ulceration in our present case, but that these two processes are not easily distinguishable under dermoscopy. Second, the hairpin vessels without white halo[5] were apparent in our present case instead of the arborizing vessels that are typical of pigmented BCC, and were therefore considered diagnostic clues for SK. Lastly, the hyperkeratosis on the edge of the lesion and epidermal hyperpigmentation, and the free pigment and melanophages in the dermal papilla, had initially been mistaken for leaf-like areas and for blue-gray globules that are characteristic of pigmented BCC nests, respectively.

In conclusion, although dermoscopy is a valuable tool for diagnosing SK, the adenoid type of these lesions that have been scratched can mimic pigmented BCC under dermoscopy thus making dermoscopic findings atypical and accurate diagnosis more difficult. In such cases, therefore, it is important not to rely solely on dermoscopy but to utilize a combination of an auxiliary examination, medical history taking, and clinical characteristics to make a differential diagnosis, particularly when secondary injuries occur.
Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given her consent for her images and other clinical information to be reported in the journal. The patient understands that her name and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Conflicts of interest

None.

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