

## Eccrine Porocarcinoma Arising From an Eccrine Poroma: a Case Report

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### Introduction

Eccrine porocarcinoma (EPC) is the malignant counterpart of eccrine poroma (EP) and is mostly found on the lower extremities in elderly adults [1]. EPC may develop as a primary tumor or from a benign long-standing EP with malignant transformation. Dermoscopy is used increasingly to facilitate clinical diagnosis [2]. In this report, we describe a case of an invasive EPC originating in an eccrine poroma and associated with an adjacent satellite lesion of eccrine poroma.

### Case Presentation

A 68-year-old woman referred a vegetative lesion in the right plantar region with one year of evolution. She reports that the lesion appeared after local trauma caused by sandals and complains of pain. On physical examination, it presented as an ulcerated, vegetative, bulky exophytic tumor associated with a satellite small plaque (Figure 1A). Dermoscopy of the lesion showed predominantly round-to-oval shaped pink white structureless areas surrounded by white-to-pink halo

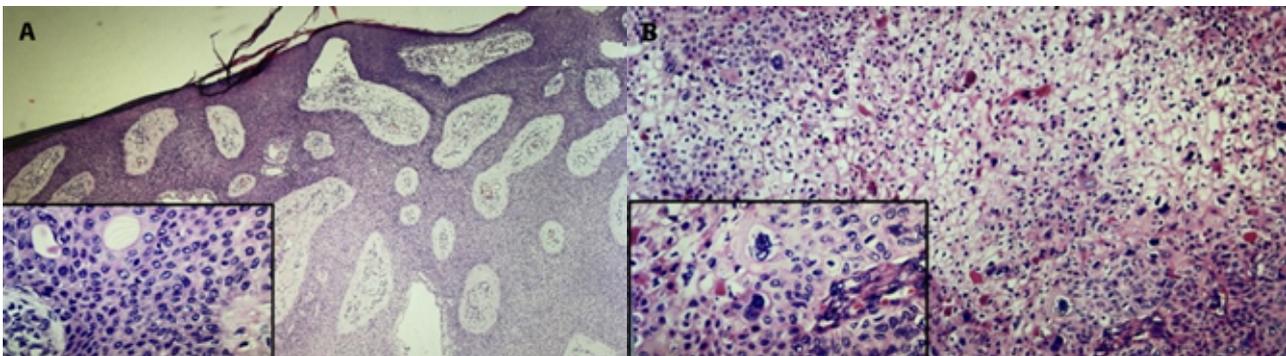
and polymorphous vessels including coiled and branched vessels with rounded ending (flower-like vessels) (Figure 1B). Ulcerated areas presented polymorphous vascular pattern with linear irregular and dotted vessels with splinter hemorrhage (Figure 1C). Histopathology showed that the main lesion was compatible with ulcerated porocarcinoma, in association with an eccrine poroma, invading the inferior reticular dermis, without vascular and perineural invasion (Figure 2, A and B). The satellite lesion was diagnosed as eccrine poroma. There were no signs of postoperative recurrence or metastasis after 6 months of follow-up.

### Conclusions

EP is a benign tumor of the sweat gland that arises from acrosyringium. EPC is a rare malignant skin tumor that usually appears in the lower limbs of elderly people as nodule, plaque or papule pink to red, sometimes with ulceration [1]. EPC may arise de novo or can originate from malignant transformation of an EP [2]. An EP that shows changes, as sudden growth, ulceration and spontaneous bleeding turns



**Figure 1.** Clinical and dermoscopic findings. (A) Clinical presentation of an ulcerated, exophytic tumor in the right plantar region associated with a satellite small plaque in the metatarsal region. (B) Dermoscopy of the non-ulcerated component showing round-to-oval shaped pink white structureless areas surrounded by white-to-pink halo (blue asterisks) and polymorphous vessels including coiled and branched vessels with rounded ending (blue arrows). (C) Dermoscopy of ulcerated areas presented polymorphous vascular pattern with linear irregular and dotted vessels (black arrows) with splinter hemorrhage (black asterisks).



**Figure 2.** Histopathological findings. (A) Histology of eccrine poroma showing epidermis with hyperkeratosis and cuboidal poroid nests with small cuboidal cells in closer examination. (B) Infiltrative tumor with proliferation of epidermis and tumor cells forming ductal lumina. Closer examination reveals atypical neoplastic cells and some mitotic figures of porocarcinoma.

on the red flag for an arising EPC. In our case the patient had both tumors, EP and EPC, and it seems probable that the EPC originated from the EP.

According to previously reported, dermoscopic features may overlap between EPC and EP, such as pink white structureless areas and white-to-pink halo, although in EPC they are present focally in the tumor and do not comprise the entirety of nodules, such as in EP [1]. Vascular pattern is often polymorphous in EPC, usually combining hairpin, dotted and linear irregular vessels, while coiled, glomerular and the typical flower, leaf-like vessels are less frequently found [1]. In the histopathological examination the usual findings include nuclear atypia, increased mitotic activity rate and necrosis. In the clinical examination, infiltrated borders, bleeding, growth and ulceration are important features that may indicate malignancy in EP-like lesions [2].

Since EPC shares multiple features with other tumors and is a rare skin neoplasm, diagnosis is a challenge.

Anatomopathological signs of invasion and cellular pleomorphism in an eccrine tumor are clues to the definitive diagnosis [2]. Treatment is necessary due to the aggressive nature of the tumor, and surgery is the first option.

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