

Eccrine poroma mimicking a supernumerary finger: Clinical and dermoscopic appearance

M Elomari Alaoui, A Fliti, L Benzekri, K Senouci, M Meziane

Department of Dermatology and Venerology, University Hospital Center Ibn Sina, University Mohamed V, Rabat, Morocco

Abstract

Eccrine poroma is a rare adult benign adnexal tumor that originates in the excretory pore of the sweat gland. Clinically, it often appears as a single tumor in the form of small papules, plaques or solitary well-limited nodules of flesh colour, pink, white, pigmented or even blue with a smooth or verrucous surface. It is mainly located on the palms of the hands, soles of the feet, trunk, face and rarely on the breasts, scrotum or vulva.

Herein, we report a case of a eccrine poroma mimicking a supernumerary finger. The biopsy confirmed the diagnosis by objectifying the histological lesions corresponding with the poroma. The aim of this article is to present an eccrine poroma with an unusual clinical presentation.

Keywords: Eccrine poroma, supernumerary finger, supernumerary finger

Introduction

Eccrine poroma is a relatively rare adult benign adnexal tumor that originates in the excretory pore of the sweat gland (1). It was first described by Pinkus and associates in 1956. It is mainly often seen between the ages of 30 and 40, with a slight male predominance. These tumors are morphologically dominated by their polymorphic lesions (2-3). Eccrine poroma most commonly found on the sole or palms, but can occur on any cutaneous surface (4). In rare cases, the tumor can mimic other skin conditions, such as a finger. Herein, we report a case of a eccrine poroma mimicking a supernumerary finger.

Case report

60-year-old men with no medical history presented a tumour on the outer part of the last toe of the right foot which has been progressively increasing in size for 1 year.

Clinical examination revealed a painless, well-limited, small oval, pedunculated tumour measuring 10 mm × 6 mm, with a firm consistency, warty surface and pink colour, located on the outer part of the left last toe, with no associated inflammatory signs.



Fig 1: A small and oval tumor well-limited, pedunculated measuring 10mm* 6mm with a warty surface and pink color on the outer part of the last toe of the right foot

There was no ulceration or regional lymphadenopathy. Dermoscopic examination reveals a homogeneous pink centre and a clear peripheral halo with a globular pattern, pinkish-white meshes, milky red areas and globules associated with dotted vessels.



Fig 2: Dermoscopy (Dermlite4, polarizedlight): Homogeneous pink centre and a clear peripheral halo with a globular pattern, pinkish-white meshes, milky red areas and globules associated with dotted vessels.

The clinical diagnoses were: a supernumerary finger, poroma, wart, and other malignant tumours

The patient underwent an X ray of the foot which showed a tumor in the left last toe with no lesions of bones.

The lesion was totally excised under local anesthesia and histopathology showed a cutaneous tissue seat of non-ulcerated epidermal hyperplasia, arranged in networks with dermal islands containing inflammatory cells in meshes. The tumor cells had a sudoral differentiation, and some places observed an excretory canaliculus outline. This histological examination confirmed the diagnosis of eccrine poroma.

Patient consent declaration: Written informed consent of this case publication was obtained

Discussion

First reported by Pinkus *et al.* [4] in 1956 eccrine poroma is a rare benign tumor of the sweat glands composed of cells differentiating toward the acrosyringium [5]. The exact prevalence is 0.0058% to 0.134% of all skin tumors. It is mainly often seen between the ages of 30 and 40, with a slight male predominance.

It is mainly located on the palms of the hands, soles of the feet, trunk, face and rarely on the breasts, scrotum or vulva.

Eccrine poroma presents clinically in the form of small papules, plaques or solitary well-limited nodules of flesh colour, pink, white, pigmented or even blue with a smooth or verrucous surface. (1) These lesions can vary in size, ranging from a few millimeters to several centimeters in diameter

Clinical diagnosis of eccrine poroma (EP) can be challenging due to its diverse appearance and the potential for misdiagnosis. EP can be misdiagnosed as malignant melanoma, basal cell carcinoma (BCC), or squamous cell carcinoma (SCC). The similarity in appearance to these malignant lesions underscores the importance of a thorough histopathological examination to confirm the diagnosis (4)

Dermoscopy can aid towards the diagnosis of poroma, although specific dermoscopic features of EP have not yet been described.

Dermoscopically poromas showed a pinkish-white background, erosions or ulcerations, yellow areas structureless, milky-red globules, yellowish-white scales, white peripheral collar, with polymorphous vessels, taking on the appearance of a cherry blossom or (chalice form) and surrounded by a white halo with a globular pattern (frog's egg aggregations) in the periphery (6)

Diagnosis is confirmed through biopsy and histopathological examination.

Histologically, Eccrine poroma resides entirely in the acanthotic epidermis and arises from the peripheral cells of the intraepidermal part of the eccrine duct. From the lower epidermis it proliferates downwards into the dermis, forming broad anastomosing bands of epithelial cells. In comparison with epidermal keratinocytes, the tumor consists of uniform, cuboidal and smaller cells in size. Intercellular bridges connect the cells (7)

The treatment of choice for eccrine poroma is surgical excision with clear margins (7). Recurrence is uncommon after complete removal of the tumor. The prognosis is excellent, as eccrine poroma is a benign tumor with no malignant potential, but in rare cases a porocarcinoma may arise on a pre-existing eccrine poroma. (8)

Conclusion

The clinical presentation of eccrine poroma can be diverse, and its diagnosis requires a high index of suspicion and a thorough histopathological examination to rule out other skin lesions, including malignant melanoma, basal cell carcinoma, and squamous cell carcinoma.

Conflicts of interest disclosures: None

Funding: None

References

1. Alwi H, *et al.* Kamus Besar Bahasa Indonesia (KBBI). Jakarta: Balai Pustaka, 2001.
2. Asmani M, Makmur J. Buku Panduan Internalisasi Pendidikan Karakter Di Sekolah. Jogjakarta: Diva Press, 2011.
3. Depdiknas. Undang-undang RI No.20 tahun 2003 tentang Sistem Pendidikan Nasional. Jakarta: Depdiknas, 2003.
4. Kertajaya H. Grow with Character: The Model Marketing. Jakarta: PT Gramedia Pustaka Utama, 2010.
5. Koesoema D. Pendidikan Karakter: Strategi Mendidik Anak di Zaman Global. Jakarta: Grasindo, 2010.
6. Raka G, *et al.* Pendidikan Karakter di Sekolah; dari Gagasan ke Tindakan. Jakarta: Elek Media Komputindo, 2011.
7. Sardjijo, Ali H. Integrating Character Building into Mathematics and Science Courses in Elementary School. Int J Environ Sci Educ. 2017;12(6):1547-1552.
8. Tampubolon F, Purba RR, Rosmawaty. Pentingnya Pendidikan Karakter Bagi Siswa Di Masa Pandemi Covid-19. In: Prosiding Seminar Nasional PBSI-IV Tahun 2021 Tema: Pembelajaran Bahasa dan Sastra Indonesia Berbasis Digital Guna Mendukung Implementasi Merdeka Belajar, 2021.
9. Tim Pengembang Ilmu Pendidikan UPI. Ilmu Dan Aplikasi Pendidikan. Bandung: IMTIMA, 2007.
10. Wibowo A. Pendidikan Karakter; Strategi Membangun Karakter Bangsa Berperadaban. Jakarta: Bumi Aksara, 2016.