Radiology Case Reports 17 (2022) 4108–4110

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Case Report

Eccrine poroma localized in the second toe☆

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ARTICLE INFO

Article history:
Received 25 June 2022
Revised 13 July 2022
Accepted 17 July 2022

Keywords:
Eccrine poroma
Toe
Foot

ABSTRACT

Eccrine poroma is a rare adult benign adnexal tumor that originates in the excretory pore of the sweat gland. It is a small reddish lesion, protuberant, fleshy, and well-defined. It is located preferably in the palms of the hands and the soles of the feet [1]. Nevertheless, it may be found on any skin part of the body's surface [2]. We report a case of eccrine poroma of relatively rare localization on the second toe of the left foot. The biopsy confirmed the diagnosis by objectifying the histological lesions corresponding with the poroma. The article aims to report an eccrine poroma located in an unusual location, surgical treatment, and follow-up.

Introduction

Adnexal skin tumors are both rare and heterogeneous primary cutaneous tumors. They are most often benign and rarely malignant. These tumors are morphologically dominated by their polymorphic lesions [1,2].

Eccrine poroma is a rare adult benign tumor that arises from eccrine sweat glands. Clinically, it often appears as a single tumor, budding, pedunculated, with a keratotic or eroded surface. This tumor can be mistaken for squamous cell carcinoma or achromic melanoma, hence the importance of early diagnosis and adequate treatment. We report a case of eccrine poroma located at the second left toe in a 77-year-old patient.

Case report

A 77-year-old hypertensive woman presented to our consultation for the appearance of a painless nodular lesion on the second left toe, gradually increasing in size for 2 years without any notion of trauma.

The clinical examination revealed a painless tumor, well limited, rounded, and small, measuring 7 mm × 4 mm, seated at the base of the second left toe with no associated inflammatory signs. The pedal pulse was preserved.

The patient underwent an X-ray of the foot, which showed a tumor(arrow) in the second left toe with no lesions of bones (Fig. 1).

Due to this questionable clinical presentation, a nodule resection was conducted to eliminate the presence of an

☆ Competing Interests: The authors declare no conflict of interest.

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https://doi.org/10.1016/j.radcr.2022.07.076

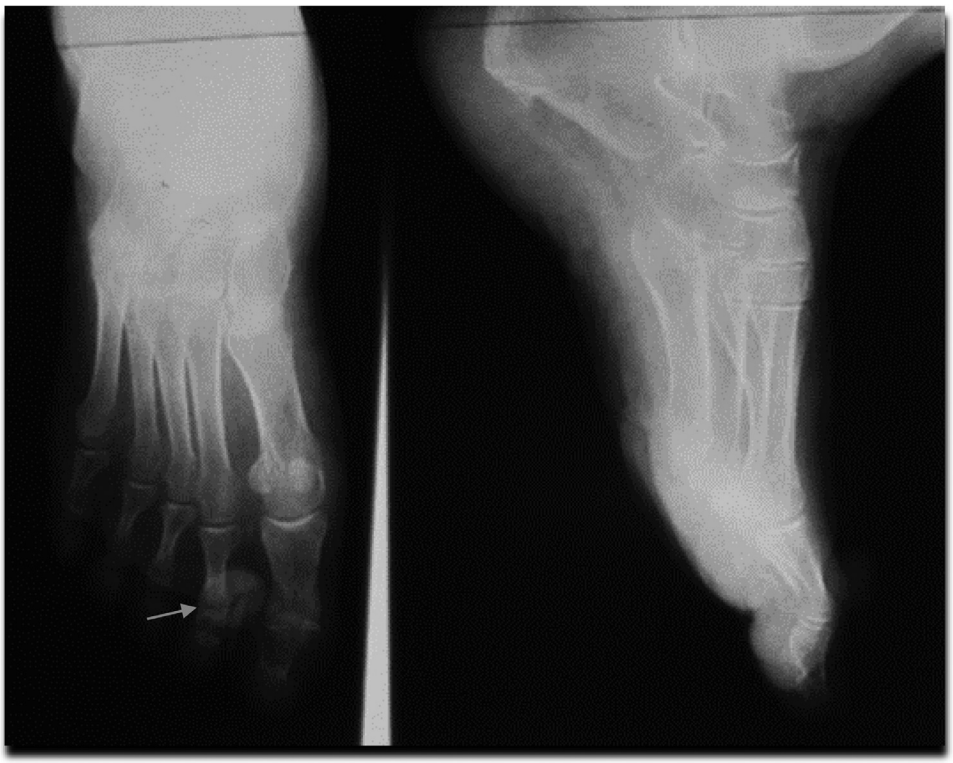


Fig. 1 – Left foot x-ray.

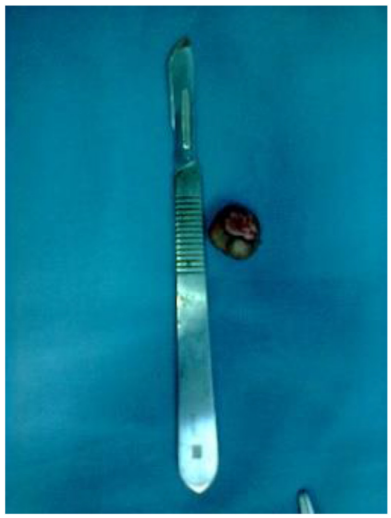


Fig. 2 – The mass after surgical resection.

invasive malignant tumor (Fig. 2). Histological examination confirmed the diagnosis of eccrine poroma. Under the optical microscope, we observed a cutaneous tissue seat of non-ulcerated epidermal hyperplasia, arranged in networks that imprisoned dermal islands containing inflammatory cells in meshes. The tumor cells had a sudoral differentiation, and some places observed an excretory canaliculus outline (Figs. 3A and B).

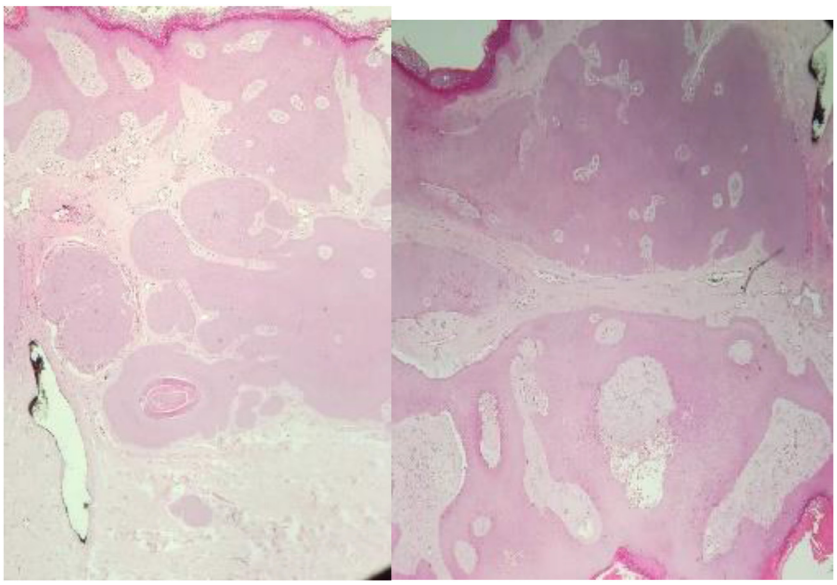
The postoperative evolution was favorable without complication or recurrence. The patient is still followed at our consultation with no sign of relapse.

Discussion

First reported by Pinkus et al. [3] in 1956 eccrine poroma is a rare benign tumor of the sweat glands composed of cells differentiating toward the acrosyringium [4]. The exact prevalence is unknown, but eccrine poroma constitutes 10% of sweat tumors which, in turn, account for 1% of skin lesions. No sexual or racial predilection exists. Eccrine poroma mainly affects adults over the age of 40 years [5]. It usually sits on the palms of the hands and the soles of the feet. Atypical localizations such as the scalp and the face can be observed.

Histologically, it is a well-defined tumor forming a plateau covered with a thin stratum corneum that develops from the epidermis. It forms epithelial trabeculae anastomoses between them, plunging into a fibrous and well-vascularized dermis—these span nucleus. Within the clumps, signs of sudoral differentiation of the excretory-poral type are observed, represented by canaliculi with a well-differentiated spiral arrangement or, more frequently, outlined. These canals may be lined with an eosinophilic cuticle, hence the misnomer of differentiation cuticular.

This tumor can be confused with squamous cell carcinoma or achromic melanoma [5]. The treatment is surgical. These tumors must be excised entirely because porocarcinoma can



Figs. 3 – (A and B) Histopathological aspect (Hematoxylin & eosin X40).

occur in almost half of cases on pre-existing eccrine poroma [6].

Conclusion

The poroma is a benign tumor with mild clinical symptoms but can progress to porocarcinoma. Skin biopsy for pathology is indicated in all suspected cases of poroma, to eliminate the diagnosis of its malignant variant [7].

Authors' contribution

Ayadi Malek Mohamed and Rania Krichen: writing and synthesis of the manuscript

Ben Jemaa Mohaemed and Ghalleb Montassar: collection and processing of data

Patient consent

The patient is informed and consent has been obtained for the publication.

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