

## A Mole in the Sole: Case Report on Eccrine Poroma

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**ABSTRACT:** Eccrine poroma is a benign tumor which arises from the intraepidermal portion of the eccrine sweat glands. 81 year old diabetic grandma worried about her persistently uncontrolled blood sugar owing to a painless mole in the sole of right foot for 2 years. Excisional biopsy revealed a sweat duct benign eccrine poroma. A relationship with diabetes mellitus could not be clearly established in this case.

**KEY WORDS:** Eccrine poroma, Diabetes, Mole, Benign tumor, Foot.

### INTRODUCTION:

Benign eccrine poroma arises from the intraepidermal portion of the eccrine sweat gland duct. It was first described by Pinkus<sup>1</sup> et al, in 1956. It is more common in the middle aged or elderly person of either sex as a painless, soft to firm, solitary, sessile mass varying in size from 2 mm to 20 mm, commonly seen in palms or soles or sides of feet. Malignant changes in long standing cases have been recorded when these lesions present with pain, sudden increase in size, bleeding or itching. Here, we report a relatively rare case of benign eccrine poroma in the sole of an elderly diabetic lady.

### CASE REPORT:

81-year-old diabetic grandma presented with a 2-year history of a gradually growing nodule in her right sole. She blames this painless lesion for persistently poor control of her blood sugar. General physician tried to aspirate pus from the lesion but in vain. There were no associated neurological or vascular symptoms. Physical examination revealed a 2 x 2 cm non-ulcerated, non-tender, soft, well circumscribed, fixed sessile mass in the subcutaneous plane of the right sole (**Fig1**). No palpable draining lymph node or motor-sensory deficit elicited. Besides HbA<sub>1c</sub> 7.5%, fasting 181mg %, post prandial sugar 310mg %, routine haemogram, liver and

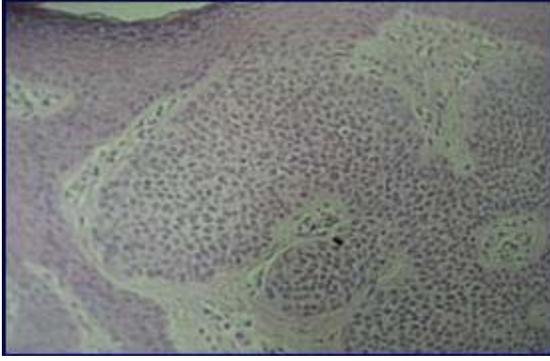
renal function, x-ray of right foot were unremarkable.

Clinically an implantation dermoid was suspected and a wide excision of skin and subcutaneous tissue was done. Excisional biopsy revealed benign neoplastic changes of sweat duct consisting of broad anastomosing bands in the deeper parts of epidermis extending to dermis. The tumour consists of sheets of uniform small cuboidal cells connected by intercellular bridges, with intervening secretion filled narrow ductal lumina lined by eosinophilic cuticle (**Fig2**). The patient was remained well with no evidence of recurrence after one year of careful follow up.



**Fig1: Moist exophytic shiny surface**

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**Fig 2: Cuboidal cells connected by intercellular bridges**

#### DISCUSSION:

Poromas are benign neoplasms composed of poroid and cuticular cells. Four histopathologic variants of poromas are accepted, according to the architectural features of the neoplasm: *hidroacanthoma simplex or intraepidermal poroma*; *eccrine poroma*, which is a poroma connected to the epidermis that extends to superficial dermis; *dermal duct tumor*, which develops when the neoplasm is composed of small, solid aggregations of poroid and cuticular cells confined to the dermis with little or no connection with the epidermis; and *poroid hidradenoma*, which is a solid-cystic, dermal poroma<sup>2</sup>. Eccrine poroma is fairly common solitary tumour found on sole or sides of feet, in about two thirds of cases, on hands and fingers, and less frequently in other areas such as neck and nose<sup>3</sup>. An unusual clinical variant is eccrine poromatosis in which more than 100 papules are observed on the palms and soles<sup>4</sup>. In its typical form, eccrine poroma arises from within the lower portion of epidermis and extends to the dermis in broad anastomizing bands of tumour cells.

Eccrine poromas are solitary nodules that predilect the soles of the foot. Rarely, malignancies may arise within these tumors<sup>5</sup>. Varying from in situ bowenoid dysplasia to frankly invasive squamous cell carcinoma with wide spread metastasis and local recurrence resistant to therapy, recorded in the literature. Malignant eccrine poroma was first described by Pinkus and Mehregan in 1963<sup>6</sup>.

Eccrine poroma should be considered in the differential diagnosis of chronic foot lesions<sup>7</sup>.

The differential diagnosis of such condition includes pyogenic granuloma, seborrhoeic keratosis, fibroma, melanoma, adenexal cysts, vascular tumours, basal cell and squamous cell carcinoma. The management of such benign eccrine poroma is complete excision, including surrounding normal skin and subcutaneous tissue<sup>8</sup>. Recurrence after incomplete excision has occurred in different parts of the body. For this reason patient should be closely followed up for recurrence and any malignant transformation. This report describes a case of benign eccrine poroma in the sole of an elderly diabetic lady but a relation with diabetes mellitus could not be clearly established in this case.

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