A Long Standing Case of Eccrine Poroma – Presenting as an Ulceroproliferative Growth

Sandhya Panjeta Gulia[1*], Lavanya M [2], Kalaivani Selvi[3], SP Arun Kumar[4]

Madhusudan Chaudhary[5]

{[1]Associate Professor, [2]Assistant Professor, [4,5]Professor}

Department of Pathology, Sri Venkateshwaraa Medical College Hospital and Research Centre, Ariyur 605102, Pondicherry, INDIA.

[3]Senior Resident, Department of Pathology, JIPMER, Pondicherry, INDIA.

[*]Corresponding Address:

sandhya_path@yahoo.com

Case Report

Abstract: Eccrine poroma is a benign tumor of sweat gland composed of epithelial cells with eccrine type distal tubular differentiation. It commonly occurs in middle or elderly age group presenting as a painless, soft to firm, solitary mass with variable size of 2-20mm. Here we report a case of eccrine poroma on right thigh in an elderly male with unusual features like large size of the tumor, surface ulceration and a long standing history of 20 years.

Keywords: eccrine poroma, sweat gland, thigh.

Introduction

Benign eccrineporoma arises from the intraepidermal portion of the eccrine sweat gland duct[1]. Although acral surfaces like palms and soles are the common sites[2] but it can also occur on face(30%), scalp(10%), trunk(14%), foot(15%) and hand(5%)[3]. It commonly occurs in middle or elderly age group presenting as a painless,soft to firm, solitary mass with variable size 2-20mm[1].Here we report a case of long standing case of eccrine poroma on right thigh for the last 20 years.

Case Report

A 78 year old male presented with an ulcero-proliferative growth over right thigh for last 20 years. Clinical diagnosis of dermatofibroma / melanoma was given. The lesion was excised and sent for histopathological examination. Grossly we received a skin covered soft tissue mass measuring 7x4x2 cm with an ulcero-proliferative growth measuring 5x4x1cm over the skin surface. Cut section- gray white solid and cystic areas(**fig.1**). The tumor was pushing the deep seated margins. The circumferential margins were 1.5,1.5,0.5 and 0.5 cm away from the tumor. Also received a specimen in separate container labeled as lymph node measuring 1x1x0.5cm which was fibro-fatty tissue with grayish brown and grayish white areas.

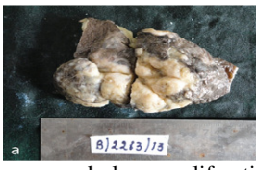


***Figure 1(a)*:** skin covered ulceroproliferative growth

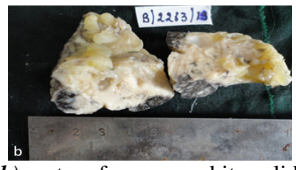
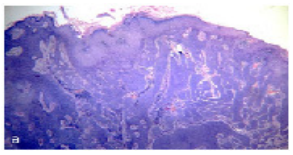


***Figure 1(b)*:** cut surface grey white solid and cystic areas with focal black pigmentation

Microscopically, the tumor was extending into the dermis as anastomosing bands of epithelial cells. Tumor cells were uniform, cuboidal in shape with round nuclei and connected by intercellular bridges. Ductal lumina was seen and blood vessels were hyalinised. PAS staining revealed ductallumina lined by PAS positive cells. The final diagnosis of eccrineporoma was given.Sections studied from the lymph node showed reactive hyperplasia only.



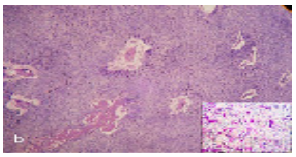


***Figure 2*:** HandE10X(a) and 40X*Fig.2*(b) islands of bland appearing cuboidal epithelial cells with ductal lumina at places. The inset shows ductal lumina lined by PAS positive cells

Discussion

Eccrine poroma, a variant of poroidneoplasm, represents 10% of all sweat gland tumors[4]. It is a benign tumor of sweat gland composed of epithelial cells with eccrine type distal tubular differentiation [4]. The pathogenesis is unknown, although it has been associated with scarring,trauma and radiation[4]. Poroid neoplasms can be classified into 3 main groups- hidroacanthoma simplex, dermal duct tumor and poroidhidroadenoma[5].Eccrine poroma shows features of dermal duct group[5].Our case had some unusual features like large size of the tumor with surface ulceration and a long standing history of 20 years. Clinical diagnosis is difficult due to variable presentation of the tumor hence differential diagnosis of pyogenic granuloma, seborrhoeic keratosis, fibroma, malignant melanoma, adenexal cysts, vascular tumors, dermatofibroma, squamous cell carcinoma and basal cell carcinoma should always be considered[1,2,6,7]. Microscopically the tumor cells are uniform ,appear smaller than epidermal keratinocytes with round basophilic nucleus and connected by intercellular bridges, narrow ductal lumina and cystic spaces also seen[1,7,8] as was seen in our case. The tumor cells contain glycogen [7] so PAS stain was done in our case and came out to be positive. Melanin pigment is found in the pigmented form of eccrineporoma[4]. Pigmented forms of eccrine poroma constitute 17% cases[9]. The tumor cells stain positive for PAS and epithelial membrane antigen and ductal linings stain positive for carcinoembryonic antigen[8].Malignant changes in long standing cases have been recorded when these lesions present with pain , sudden increase in size , bleeding or itching[10]. Incidence of malignancy arising in eccrine poroma is less than 0.01% of all skin biopsies [11].

Conclusion

We report a rare case of Eccrine Poroma in the thigh with the clinical suspicion of Melanoma / Dermatofibroma. The diagnosis of eccrineporomadepends on correlation of clinical findings, microscopic picture, dermoscopic analysis. Complete excision of the tumor is the treatment of choice. Regular follow up of the patient is imperative to prevent recurrence and malignant transformation.

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