Case Report

Scrotal Porocarcinoma- An Incidental Finding In Filarial Scrotum

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ABSTRACT

POROCARCINOMA is a rare tumor arising from sweat gland ducts. The tumour was first described by Pinkus and Mehregan in 1963 as epidermotropic eccrine carcinoma. The tumor favors extremities, particularly legs and feet, usually seen in adults of either sex. Clinically, it may present as verrucous plaque, polyloid growth or an ulcerative lesion of long duration. Local recurrence and metastasis to skin, lymph nodes, viscera and bone may occur. Treatment is wide local excision. Metastatic lesions can be treated with chemotherapy. We report an extremely rare case of scrotal porocarcinoma.

1. Introduction

Eccrine porocarcinoma is a very rare tumor and those arising from the scrotum, are still rarer. It was first described by Pinkus and Mehregan in 1963 as epidermotropic eccrine carcinoma [1]. It is also described as Epidermotropic eccrine carcinoma, malignant eccrine poroma, malignant hidroacanthoma simplex, malignant intraepidermal eccrine poroma, poroepithelioma.

CASE HISTORY

59 Yr old male presented with scrotal swelling. Clinically diagnosed as filarial scrotum, grade IV, involving penis. He was admitted for scrotoplasty. After scrotoplasty we received a piece of scrotal skin measuring 10X7X3cm. External surface showed multiple grey white nodules, largest measuring 0.7cm. Cut section revealed solid, grey white nodules at surface. Dermis was thickened, grey white, myxoid and edematous. Sections from grey white nodular areas display islands of tumor cells having pleomorphic hyperchromatic nuclei (Fig1). Many mitotic figures are noted, with few atypical mitotic figures. Sheets show occasional cystic spaces (cribriform appearance), squamous differentiation and focal necrotic areas (Fig2). No palisading of peripheral cells seen. Epidermis is unremarkable. Dermal lymphovascular invasion noted. Focal spiraling ductular formations lined by cuboidal cells noted. Diagnosis of porocarcinoma was made.

DISCUSSION

The diagnostic identification of sweat gland carcinomas is hampered by their rarity and their histologic resemblance to various visceral tumors, leading to confusion with metastatic lesions [2].

Eccrine porocarcinoma is a rare tumor arising from sweat glands. It originates from intraepidermal and upper dermal eccrine ducts.

It may arise de novo or as a malignant transformation in a pre-existing poroma, hidroacanthoma simplex, or in association with naevoid sebaceous [3]. It is predominantly observed in elderly patients [4] with an average age of 67 years. Women and men are equally affected. 44-50% of eccrine porocarcinomas arise on the legs, buttocks, or feet. The trunk accounts for 24% of the lesions and the head 18% of the lesions with less frequent lesions located on the upper extremities.

Clinically it may present as a verrucous nodulo-ulcerative plaque.

Eccrine porocarcinoma forms intraepidermal and dermal nests and cords of epithelial cells with pale cytoplasm. The tumour masses form clearly demarcated and frequently rounded nests of polygonal cells with pleomorphic and irregularly-shaped nuclei, prominent nucleoli, and numerous mitotic figures. The overlying epidermis may be acanthotic. Intercellular bridging between the tumour cells is inconspicuous. The tumour cells may contain glycogen. Connection to the intradermal eccrine ducts may be observed. Deep dermal intralymphatic invasion may be observed.
in up to 15% of the lesions. The differential diagnosis includes eccrine poroma, hidroacanthoma simplex, and Paget disease [5]. Eccrine poroma and hidroacanthoma simplex may show focal atypia, but the lesions are symmetrical and well circumscribed. In the absence of residual eccrine poroma, it is very difficult to differentiate eccrine porocarcinoma from squamous cell carcinoma.

**PROGNOSIS AND PREDICTIVE FACTORS**

Approximately 20% of eccrine porocarcinomas recur after excision. Regional lymph node metastasis occurs in 20% of patients, while 12% develop distant metastases. Patients with metastatic disease have a high mortality rate. Increased number of mitoses, lymphovascular invasion and tumour depth (> 7 mm) have all been associated with a relatively poor prognosis [5].

**CONCLUSION**

Malignant sweat gland neoplasms are rare tumors. The scrotum is an extremely uncommon primary location for porocarcinoma and distribution have no correlation with sweat gland density. Porocarcinoma can show early invasion of dermal lymphatics and multiple epidermotropic metastases. Prognosis is poor once metastatic. Treatment of choice is wide local excision.

**Reference:**


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