Eccrine porocarcinoma of the scrotum

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Eccrine porocarcinoma, an uncommon carcinoma of the sweat glands, rarely arises from the male genitalia.

In past reports this presentation has been associated with Paget's disease. This is the first known report of eccrine porocarcinoma of the scrotum unassociated with Paget's disease.

Key Words: eccrine carcinoma, scrotal carcinoma, sweat gland carcinoma

Introduction

Eccrine porocarcinoma is a rare skin neoplasm originating from sweat glands. Genital eccrine carcinoma typically presents in the vulva and is commonly associated with extramammary Paget's disease. It is extremely rare for this cancer to arise in the scrotum. Here we present what is, to the best of our knowledge, the only published case of eccrine porocarcinoma of the scrotum unassociated with Paget's disease.

Case report

An 86-year-old man presented with a 2-year history of a nonspecific ulcerated lesion on the left lateral aspect of his scrotum. The lesion had been slowly enlarging but was otherwise asymptomatic. He denied any history of sexually transmitted diseases or trauma and had no prior malignancies. Examination revealed a 2 cm ulcerated area with increased peripheral pigmentation and weeping minimal serous fluid. On palpation the lesion was firm, nontender, and localized to the scrotal wall. Conservative treatment with oral cefazolin yielded no response, and an excisional biopsy was performed under local anesthesia.

Pathology

Histopathologic examination revealed skin with an invasive tumor present in the dermis and composed of irregular nests and strands of epithelial cells in a dense pink stroma secondary to copious basement membrane deposition. There were multiple contacts between the tumor and the overlying epithelium Figure 1, which was without evidence of dysplasia. In areas the tumor demonstrated syringotropism, associating with and following sweat ducts Figure 2. These features led us to classify this tumor as a malignant eccrine poroma (eccrine porocarcinoma).

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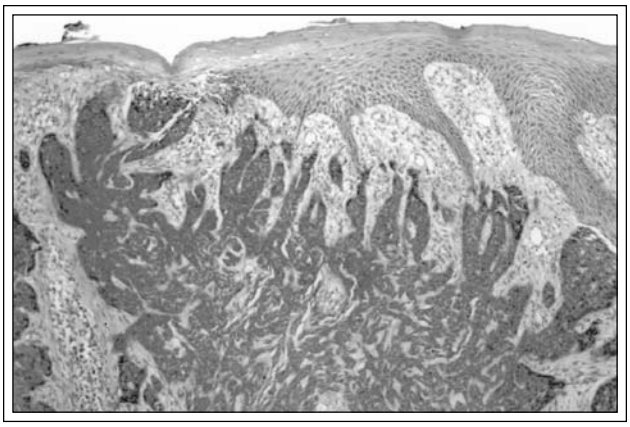

Figure 1. Invasive eccrine porocarcinoma. Note the multifocal epidermal origin of the tumor. (Hematoxalyn and Eosin, 40x)

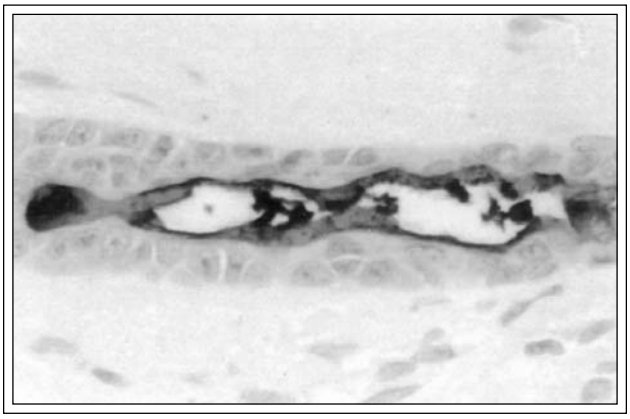

Figure 2. Syringotropism and lumen formation. There was spread of tumor cells along established sweat ducts. Gill's Hematoxalyn counterstained CEA immunohistochemistry (600x).

Discussion

Eccrine porocarcinomas usually present in the 6th and 7th decades of life. They occur most commonly on the scalp, trunk, or axilla, as painless red or violet papules rarely with ulceration.[1] Presentation in the male genitalia is extremely rare, with only two such cases identified in the literature. One arose from the scrotum[2] and the other from the penis.[3] Both were associated with Paget's disease. In the present case, a diligent search of the entire pathologic specimen failed to reveal any evidence of Paget's disease. The rarity of these tumors and minimal symptomatology often result in diagnostic and treatment delays of greater than 5 years in 23% of patients.[1] These tumors are slow growing but can metastasize to bone and lungs or present as a breast mass.[4] Prognosis is related most directly to the degree of tumor differentiation and lymph node involvement. The reported 10-year survival rates are 9% and 56%, respectively, for patients with or without lymph node involvement. Treatment is wide local excision with lymph node dissection reserved for the more aggressive lesions.[1] Due to the rarity of this disease, adjuvant treatment data is anecdotal, with radiation therapy showing mixed results and chemotherapy indicating some success.[4] The current patient died of a myocardial infarction 3 months after his diagnosis.

In summary, we report the third case of primary male genital eccrine porocarcinoma and the only case not associated with extramammary Paget's disease. Early identification and surgical treatment will likely result in the best outcomes for these patients. □

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