

## Scrotal Squamous Cell Carcinoma: About a Rare Clinical Case and Review of Literature

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**Abstract:** Squamous cell carcinoma of the scrotum is uncommon. It was the first cancer directly associated with a specific occupation when Perivall Pott in 1775 described it in chimney sweeps in England. Some previous studies indicate that these histologic subtypes may have a more aggressive behavior than other subtypes of scrotal cancer. In this paper, we report an atypical scrotal squamous cell carcinoma and we analyze different data about diagnosis and treatment of this rare entity.

**Keywords:** Scrotum, Squamous cell, Carcinoma, Chemotherapy.

### INTRODUCTION

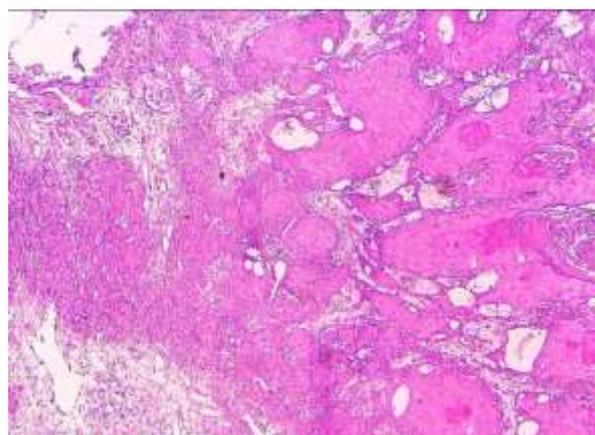
Squamous cell carcinoma (SCC) of the scrotum is a rare neoplasm, with an incidence rate of 1.5 per 1000000 person-years [1]. It was the first cancer linked to occupational exposure [2, 3]. The frequency of the disease has decreased in the last 50 years. There is the most frequent form of scrotal cancer, however rare cases of basal cell carcinoma, melanoma, Paget's disease and sarcoma have been reported [4]. Their evolution is more pejorative than other histologic subtype [1].

### CASE REPORT

A 44-year-old Moroccan man, a heavy smoker was presented without previous history of sexually transmitted disease, trauma in the scrotal area. Previous radiotherapy (RT) or exposure to chemicals; initially he presented 8 months ago with a scrotal mass and purulent drainage. He was diagnosed with a scrotal abscess; incision and drainage was performed. The wound healed poorly, and the lesion recurred. Biopsy from the edge of the ulcer revealed keratinising squamous cell carcinoma of the scrotum (Fig. 1).

Physical examination found an oval ulcerated-bleeding lesion. A multiple firm, mobile, and enlarged inguinal lymph nodes were palpable bilaterally.

Magnetic resonance imaging (MRI) of pelvic showed a 124x10mm perineal mass with infiltration into base of prostate, urtère, and right ischio pubic branch. Enlarged bilateral inguinal nodes and mildly enlarged external iliac chain lymph nodes were also noted (Fig 2). Thoracoabdominopelvic computed tomography showed a numerous metastases in the lung. All the blood investigations were within normal limits. The patient had not adequate performance state to receive any specific therapy and he succumbed to the disease 1 month later.



**Fig. 1: Biopsy of the scrotal mass: tumor cells are large and polygonal with abundant eosinophilic cytoplasm (HESx50)**



Fig. 2: Magnetic resonance imaging (MRI) of pelvis showed a perineal mass locally advanced

## DISCUSSION

Squamous cell carcinoma of the scrotum is a very rare clinical entity, the incidence has been reported to be less than 10 cases per year in the United States. It was the first malignancy linked to occupational exposure when Perivall Pott in 1775 described it in chimney sweeps in England [3].

Squamous cell carcinoma of the scrotum has historically been associated with exposure to occupational (industrial) and non-occupational (environmental) carcinogens such as chimney soot, tars, paraffin, and some petroleum products [4].

The mean age of patients is 62 years [5]. White men are more prone to develop testicular cancer during their lifetime in comparison to African-American men [6]. Patients typically present with a solitary wart or nodule on the scrotum [7]. It can be associated with ulceration or bleeding as the lesion enlarges in the later phases [8].

Squamous cell carcinoma is the most common malignant tumor of the scrotum [4], followed by extramammary Paget's disease (21%), basal cell carcinoma (18%), and sarcoma (18%) [1].

In general, survival was worse in patients with squamous histologic features, compared with other histologic subtypes [1] and the median survival for localized, regional, and distant diseases was 115 months, 73 months, and 6 months, respectively [9].

Surgery with a negative resection margin is the principal treatment for scrotal squamous cell carcinoma [2]. The role of lymph regional node dissection remains controversial [2], many authors propose bilateral radical groin dissection to remove micrometastases [10, 11].

Adjunctive treatment like radiotherapy or chemotherapy or both have not proved useful and only palliation is usually feasible for late stage disease [2]. However previous studies proposed cisplatin-based

combination chemotherapy with Bleomycin, methotrexate, to have effect, resulting in stabilization of the disease [12, 13].

The prognosis in squamous cell carcinomas depends on various factors like age of the patient, size, grade and stage of the tumor, and the extent of surgery [14].

In our case, the diagnosis was established in a late stage and surgery, chemotherapy or radiotherapy could not possibly offer any meaningful improvement in terms of outcome.

## CONCLUSION

In summary, we experienced a case of squamous cell carcinoma of the scrotum. The diagnosis was confirmed by histology, specific therapy by systemic chemotherapy was not feasible because of the poor performance status of the patient.

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