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Plastic Surgery

Fournier's Gangrene Revealing Squamous Cell Carcinoma

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Abstract **Case Report**

The association of squamous cell carcinoma and necrotizing fasciitis is rare. It must however be evoked each time there is a modification of the usual local symptomatology, of an impasse of the healing. Delay in diagnosis can be fatal for the patient. The anatomopathological study can be of great help to the attending physician. We report the case of a 66-year-old patient in whom a diagnosis of carcinomatous degeneration on Fournier's gangrene was made.

Keywords: Squamous Cell Carcinoma, Fournier's Gangrene, Biopsy, Degeneration, Metastasis.

INTRODUCTION

The incidence of squamous cell carcinoma on Fournier's gangrene remains very rare, and practically undescribed in the literature, Scrotal carcinoma is a rare pathology which has been linked to exposure to certain industrial and occupational carcinogens, The form The most common histological condition is squamous cell carcinoma [6]. It most often occurs in the sixties on a pre-existing lesion, gradually increasing in size. Fournier gangrene is a rapidly progressive, life-threatening infectious process that involves the genital and perineal areas. The disease is one of the few urological emergencies and requires prompt surgical debridement as well as antibiotic therapy. We report an un- common case of carcinomatous degeneration of Fournier' gangrene of an 66 years old man.

CASE REPORT

An This is the patient H.M, sixty-six years old, married and father of five children, living in Marrakech, taxi driver by profession, of a low socioeconomic level, positive for hepatitis B, with no other notable pathological history, operated in January 2022 for flattening of a scrotal starting point Provider gangrene by urologists, then the patient was referred to our training for coverage of the resulting loss of substance. (Fig1.)

Fig. 1: Per-operative pictures of a scrotal burial

Patient admitted to our training one month after the flattening of his Fournier's gangrene, on admission the patient presented a red, eutrophic, non-bleeding bud in perineo-scrotal contact, with a urinary catheter in place, the patient benefited a cover by burying the testicles and direct suture in two planes. The postoperative follow- up was marked by a release of the sutures, and non-healing, with a solution of the continuity of the membranous urethra at two levels and the installation at five months of a large inguinal lymphadenopathy and a hot inguinal collection, painful on palpation drained and put on triantibiotic therapy. (Fig2.)

Fig. 2: Per operative picture showing the drainage realised

In the view of his improvement the patient was declared discharged; Three weeks later a budding lesion next to his loss of scrotal substance was visible whose biopsy was in favor of squamous cell carcinoma moderately well differentiated with pelvic (Fig3.)

Fig. 3: The clinical aspect of the budding lesion

MRI: bulky aggressive tumoral process infiltrating the bilateral pelviperineal and inguinoscrotal region with right inguinal ADP.

A Urological Opinion indicated that the patient was not operable and oncologist: to do palliative chemo- therapy. (Fig4.)

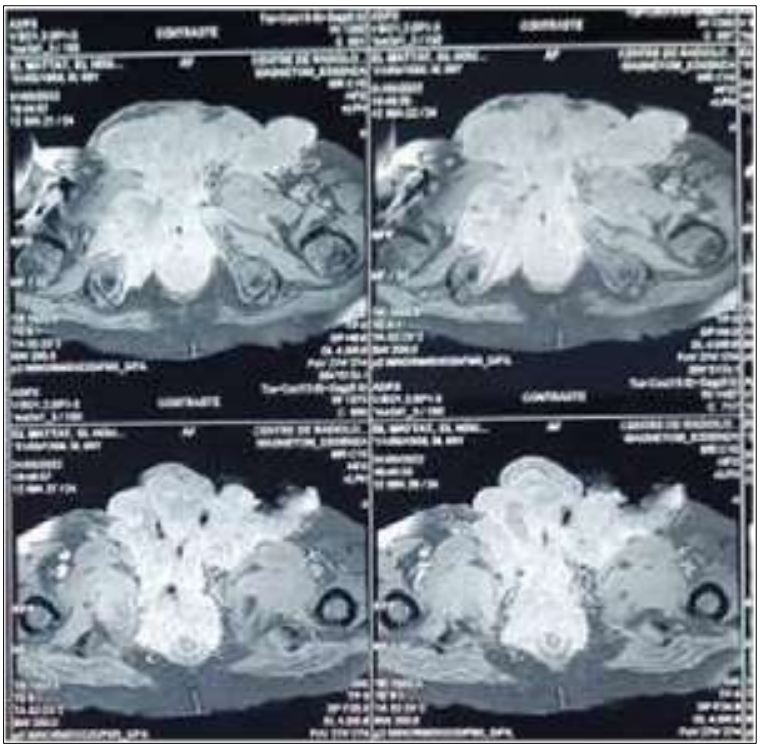

Fig. 4: MRI showing a bulky aggressive tumor infiltrating the bilateral pelvi perineal and inguino scrotal region with right inguinal ADP

DISCUSSION

Since the description of squamous cell carcinoma in chimney sweeps by Percival Pott in the year 1775 [5, 6], soot-related cancer of the scrotum and penis has become anecdotal. This was amongst the first described environmental causes of cancer. Scrotal carcinomas may also occur as a result of non-specific factors such as poor hygiene and chronic irritation, rather than industrial exposure alone [6-8]. This may be partially explained by the similarity in the mechanism of formation of scars by fibrosis and tumorogenesis [7, 8]. Scar carcinomas like Marjolin's ulcer and the carcinoma developing in the scar of Fournier's gangrene may also be explained by this similarity in the mechanism. The prognosis of scrotal carcinomas depends upon the stage and the grade at presentation therefore the significance of early diagnosis for prolonging the survival in a patient of squamous cell car- cinoma cannot be overemphasized. High-grade tumours usually have positive

Marjolin's ulcer, a scar carcinoma commonly observed in chronic burn scars is usually slow growing but may also behave aggressively in the form of local recurrence, along with lymph node metastases if the normal tissue is infiltrated. Classically the latency in some cases may extend up to 50 years [4, 5]. The most significant predictor of survival in patients with squamous cell carcinoma of the scrotum is age, stage and histological grade at the time of initial diagnosis therefore a high index of suspicion to make an early diagnosis is mandatory in order to improve survival.

Diagnosis is established by biopsy and the primary modality of therapy is surgery in the form of wide local excision with a safe margin of 3–5 cm in order to achieve R0 resection (microscopically free margin) along with ilio- inguinal block dissection on the affected side [7,8]. The wide local excision in some patients may leave large defects amounting to hemi scrotectomy and the testes on the affected side may either have to be sacrificed for non availability of accommodation or translocated to the contra lateral hemiscrotum facilitating closure of the surgical wound and preservation of testes, as was done in the reported case [9]. The neo- adjuvant therapy (both chemo- and radiotherapy) has also been recommended to downstage (reduction in the tumour size and lymph node status thus improving the stage of the disease) a very large lesion in or- der to achieve R0 resection [10, 11]. Adjuvant radiotherapy and combination chemotherapy in the form of four courses of (Methotrexate, Bleomycin and Cisplatinum) is also recommended to achieve a better disease free survival [12]. The prognosis in squamous cell carcinomas depends on various factors like age of the patient, size, grade and stage of the tumour and the adequacy of surgery [7, 8].

CONCLUSION

The association of squamous cell carcinoma and necrotizing fasciitis is rare. It must however be evoked each time there is a modification of the usual local symptomatology, of an impasse of the healing. Delay in diagnosis can be fatal for the patient, early stage

of diagnosis is the key for a better managment of the tumor an early stage.

Conflict of Interest: No conflict of Interest

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