



Skin Metastasis of Infiltrating Bladder Cancer

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Abstract

Skin metastases of bladder cancer are a rare clinical entity, with poor prognosis; their diagnosis is based mainly on histological confirmation. In this work, we report a case of skin metastasis of invasive urothelial carcinoma of the bladder in a 58-year-old patient, who died two months after the onset of skin metastasis.

Keywords: Skin metastases; Bladder cancer; Histology; Prognosis

Introduction

Bladder cancer ranks fifth in incidence and accounts for 3% of cancer deaths. It is the second most common and fatal cancer in urology after the prostate cancer. Its incidence increases with age, and the majority of cases are discovered after the age of 60.

Muscle invasive bladder tumors account for 15% to 25% of tumors on diagnosis. They are associated with lymph node invasion in 20% to 60% of cases, and are metastatic at the outset in 7% of cases [1]. Cutaneous metastases of a bladder tumor in a location are rare and severe; with an incidence 0.84% of all skin metastasis as mentioned by Block et al. [2]. This finding immediately indicates the passage of neoplastic cells to the liver and lung at least at a microscopic stage.

Observation

Patient E.H., 58 years old, chronic smoker at a rate of 40 packs/year, who presented with total clotting hematuria for 10 months, accompanied by an irritative syndrome of pollakiuria and urination burn, complicated a month ago by bilateral low back pain.

On clinical examination we noted: A Performance Status 2 patient, mucocutaneous pallor with 2 skin nodules, one in the right hypochondrium region and the other in the umbilical region, firm, painless, fixed with inflammatory signs at 4 cm at its widest length (Figure 1).

The rectal examination revealed a fixed bladder base. Paraclinically, the complete blood count showed severe anemia at 4.3 g/dl, blood creatinine was normal at 8.1 mg/l. Radiologically, the ultrasound showed a process occupying almost the entire bladder lumen, responsible for bilateral uretero-hydronephrosis.

The anemia had been corrected by blood transfusion, with control hemoglobin at 10 g/dl and a sterile ECBU.

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Figure 1: Skin nodules in the right hypochondrium and the sub-umbilical region.



Figure 2: Endoscopic appearance of a tumor-filled bladder.

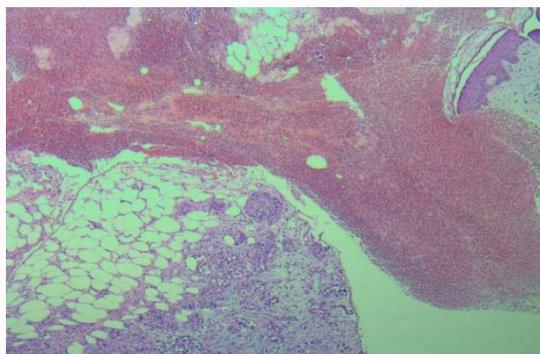


Figure 3: Infiltration of the hypodermis by a little differentiated carcinomatous proliferation HES Magnification x40.

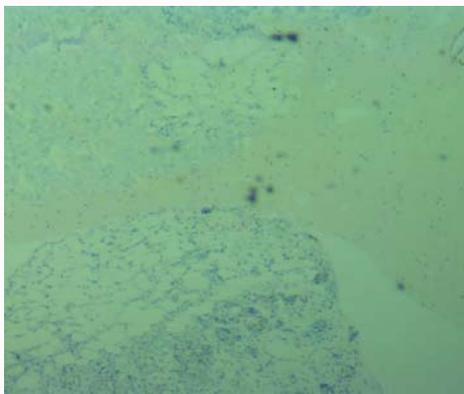


Figure 4: Immunohistochemical study: nuclear positivity of GATA3.

In bladder endoscopy, we noted that the bladder is full of tumor, masking the 2 ureteral meatus (Figure 2), a biopsy resection had been made and the anatomopathological studies had concluded a high grade papillary urothelial carcinoma infiltrating the muscularis classified as pT2, G3 according to the WHO classification.

The sub-umbilical nodule biopsy confirmed hypodermal cutaneous metastasis of poorly differentiated urothelial carcinoma (Figure 3) with GATA3 positive in the immunohistochemical study (Figure 4).

Completion of the paraclinical extension workup by performing thoraco-abdominal-pelvic CT had shown a locally advanced bladder tumor, predominantly the right bilateral reno-urethral area as well as

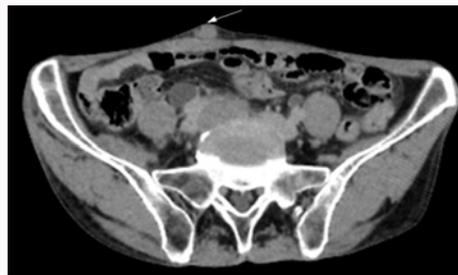


Figure 5: Abdominal-pelvic CT cross-section, Arrow: Skin nodule.



Figure 6: Cross-sectional abdominal-pelvic CT showing bladder tumor process.

primary right iliac lymphadenopathy, no lesions of other viscera or of the bone (Figure 5, 6).

The decision of the multidisciplinary consultation meeting was to do a bilateral urinary diversion by first bilateral nephrostomy followed by chemotherapy. The patient had undergone bilateral nephrostomy and discharged from our department with a satisfactory clinical outcome. However, on Day 15 after discharge, the patient died of hypovolemic shock.

Discussion

The skin is an infrequent site of metastatic spread of deep cancers and represents the 12th place among metastatic sites of cancers [3]. For vesical tumors, metastatic dissemination is essentially by lymph node, bone, liver and lung [3]. The first case of skin metastases of a bladder tumor was reported in the literature in 1909 [4]. The incidence of skin metastases of vesical tumors is 0.84% as mentioned by Block et al. [2]. The spread of cancer cells to the skin is done according to four mechanisms: Invasion by adjacency from near to near, a hematogenic extension, lymphatic or iatrogenic manipulation (site next to the scar) [5]. The skin metastases usually manifestate in the face, the neck, the trunk and the extremities [6], however they can be located at any of part of the cutaneous region. The clinical aspect of metastasis can take many forms. Brownstein et al. [7] described 3 main clinical aspects: Nodular lesion (the case of our patient), sclerosis lesion and inflammatory lesion. Diagnosis requires histological confirmation. The biopsy makes it possible to establish the diagnosis, but the urothelial origin sometimes remains difficult to affirm, hence the interest of the immunohistochemical study. Differential diagnosis is mainly lymphatic malformations, shingles, cellulite, lymphoma and radiation dermatitis.

The prognosis is bad with a life expectancy of less than one year (2 months for our case). Given the very limited number of cases reported in the literature and the limited survival, the treatment regimen remains difficult to establish.

The treatment of choice is palliative chemotherapy. Surgery is indicated for small localized lesions while radiotherapy for palliative care has not yet been studied [2].

Conclusion

Cutaneous metastasis is a rare manifestation of the bladder tumor demonstrating the aggressiveness of the bladder tumor. Thus, making its diagnostic and therapeutic management very difficult. Our case in turn testifies to the undesirable character of a skin metastasis in the evolution of bladder cancer.

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