

Initially metastatic bladder carcinoma in a 31-year-old patient.

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Abstract

Bladder cancer is the fifth most common malignancy, peaks in incidence after the sixth decade of life. reports of the clinical behavior of bladder cancer specifically in young patients are restricted to small series. While some hereditary syndromes such as Li-Fraumeni or retinoblastoma carry an increased risk of urothelial tumors at an early age. their low prevalence means that few clinicians see such cases. This pathology occurs mainly in the male patient and with a prevalence of 4 % in the male patient younger than 40 years old. The same identified factors found in the elderly patient were identified in the youthful patients. Clinically, like in the older patients, hematuria, irritative symptoms (urgency, frequency, dysuria) and clinical decline were described before the confirmed diagnosis. Bladder tumors are usually superficial before the age of 40 therefore have a low aggressivity rate. Treatment of invasive bladder cancer in young patients does not differ from the treatment at an old age. Also, the prognosis of patients under 40 years of age with bladder carcinoma is claimed to be better than of those presenting in later life.

Keywords: Bladder Tumor; Young Patients; Invasive Bladder Tumor; Metastatic Bladder Tumor in the Young Patient

1. introduction

Carcinoma of the bladder is distinctly uncommon in patients less than 40 years of age; the peak incidence of bladder carcinoma occurs in the sixth decade opposing to a 4 % incidence rate in patients younger than 40 years old. Same incrimination of risk factors has been shown in patients younger than 40 years old (Smoking mostly). Histologically, invasive bladder carcinoma is not frequent and needs the same treatment as invasive bladder disease in older ages. Authors had suggested that bladder carcinoma in patients aged between 31 and 40 years had the same prognosis as in older patients.

2. Case report

We report the case of a young patient of 31 years old with a smoking habit (10 years), no medical history and no surgical history. The patient was initially admitted for painless hematuria, irritative bladder signs and shortness of breath all evolving in apyrexia and clinical decline evolving for the last 4 months.

Clinical examination showed no signs of inflammatory phenomenon on the scrotum with no nodules or induration on either the testis. The prostate examination showed a small prostate (20 cc) without nodules with a mobile and soft bladder base. Patients reported a weight loss of 6 kgs in the last 6 months.

Blood work was realized for the patient showing no abnormalities with a conserved kidney function.

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We first realized an ultrasound examination for the bladder showing an anterior tumoral formation on the anterior wall of the bladder measured at 2 cms with no signs of upper urinary tract effect.



Figure 1 Axial ultrasound showing the bladder tumor

Next, under local anesthesia, a cystoscopy was done showing a 3 cms tumor with a papillary and nodular macroscopic first sight. A free ureteral meatus on both sides with a well urine flow. Normal macroscopic aspects on the different walls of the bladder. No urine cytology has been performed.



Figure 2 Cystoscopical aspect of the tumor

While preparing the patient for anesthesia we performed a chest x ray showing alarming multiple round tissue images on the lungs.

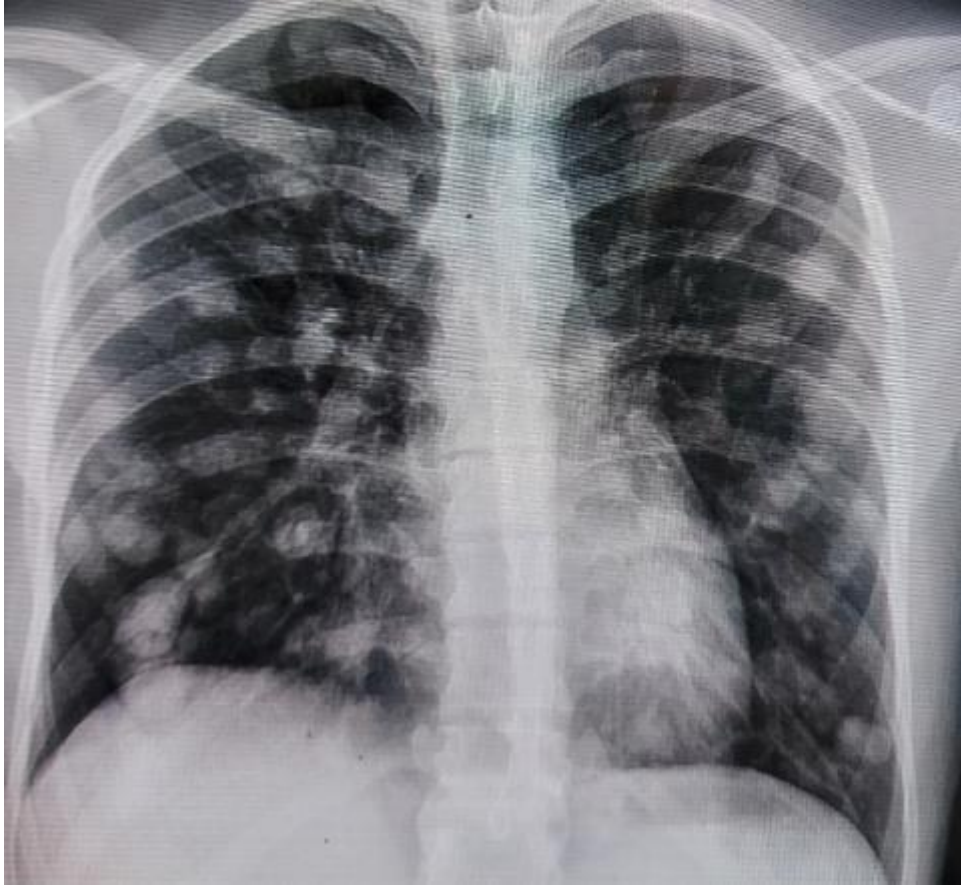


Figure 3 Chest Xray showing multiple suspicious images in the lungs.

A CT scan with injection confirmed a multi metastatic lung with a bilateral characteristic. A normal upper urinary tract. And a 3 cms measured anterior bladder tumor.

We urgently proceeded to perform a transurethral resection of the bladder tumor under spinal Anastasia. The resection was without incident and resulted in a subtotal and deep resection of the tumor. post operative events were favorable with clear urine flow the next day.

anatomopathological examination resulted in a transitional cell carcinoma (TCC) with PT2 staging.

Patient was discharged to oncology to begin the palliative chemotherapy (

The follow up was dramatically bad with the passing of the patient on the fifth month mark.

3. Discussion

Urinary bladder cancer ranks ninth in worldwide cancer incidence. Bladder cancer can occur at any age, it is generally a disease of middle aged and elderly patients. 40 years is defined as a limit according to several epidemiological studies as the data gradually changed from 30 years to 40 years and then to 50 years (1). Usually, this type of cancer has a male predominance for the older patients. The male to female ratio reduces for the younger category (younger than 40 years old), this could be explained by a more homogeneous exposure to carcinogenic factors (environmental or occupational agents)Cigarette smoking and specific professional exposures are the main known causes of bladder cancer(2)(3).The clinical symptoms and functional signs are similar in both elderly and young patients (hematuria, bladder irritation signs). The most common form of bladder cancer remains non muscle invasive bladder carcinoma with stage pTa and pT1 up to 70 to 80% of all urothelial cancers in the bladder (5). Once bladder cancer is suspected, imaging (injected or non-injected CT scan) and cystoscopy ought to be performed.

Conflicting results have been reported regarding disease prognosis in younger patients with BC (7)(4). It is important to mention that these patients have longer life expectancy, higher tension levels, and treatment expectations compared to their older counterparts. Therefore, treatment should be curative and improve life expectancy. Most of the authors found that bladder cancer in younger adults is usually low stage and grade, with prognosis being above average. According to many studies, only 7 % of BC in young adults are invasive. (7)(3)

In terms of prognosis, tumor recurrence was significantly lower in younger age group when compared to older counterparts while rates of tumor progression were same (9). Therefore, they stressed clinicians to be vigilant while assessing invasiveness of tumors and warned not to delay the treatment in patients <40 years old. Metastatic invasive bladder cancer has a very poor prognosis. (8)(10)

Treatment of invasive bladder cancer either in the elderly or young patients with no metastasis remains radical surgery (cystectomy with ileal urinary derivation) (9). Metastatic invasive bladder tumors in young patients are rarely reported in the literature and has fatal follow up.

4. Conclusion

Bladder cancer in younger adults is mostly low stage and low grade. We need to be vigilant with patients in a higher stage and grade as it is related with recurrence, progression, and metastatic disease.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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