

Case Report

Large cell urothelial bladder carcinoma associated with squamous cell component: a case report

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Abstract: Squamous cell carcinoma associated with large cell carcinoma is a relatively rare bladder malignancy. Squamous cell bladder carcinoma is known to have poorer prognostic but is more sensitive to chemotherapy. We report a case of mixed squamous and large cell urothelial carcinoma, occurring in a sixty-one year-old Caucasian patient, and revealed by dysuria and macroscopic hematuria for three months. The patient was admitted to hospital and Ultrasonography and Computed-Tomography scan showed a voluminous 10 cm pelvic tumor responsible for bilateral hydronephrosis, necrotic retroperitoneal lymphadenomegalies, pleural effusion and liver metastasis. Blood tests showed severe anemia and acute kidney failure. The patient underwent bilateral nephrostomy and pelvic mass biopsy cores. The pathology report of biopsy specimens from the mass revealed large cell carcinoma and squamous cell component. The patient was treated with chemotherapy Carboplatine + Gemcitabine.

Keywords: Large cell carcinoma, urinary bladder, bladder malignancy, squamous cell carcinoma

Introduction

Squamous cell carcinoma is an unusual form of bladder carcinoma.

Risk factors are the long-term indwelling catheter and chronic irritation (calculi or diverticula).

We report the case of an histological variant of urothelial carcinoma; a mixed squamous cell and large cell carcinoma involving the bladder, in a 61-year-old patient.

Case presentation

A 61-year-old Caucasian male was admitted to hospital for severe dysuria and macroscopic hematuria for about three months. He had no medical past, but was a heavy smoker.

On physical examination the patient presented with signs of anemia due to macroscopic gross hematuria, and an abnormal pelvic mass.

Ultrasonography imaging showed a voluminous pelvic tumor, responsible for bilateral hydronephrosis. Computed Tomography scan con-

firmed a 10 centimeters cystic and tissular tumor, pleural effusion, several necrotic retroperitoneal lymphadenomegalies and two liver metastasis.

Blood tests revealed severe anemia: haemoglobin rate at 5.8 g/dl and acute renal failure: creatinine levels at 569 μ mol/l. Glomerular filtration rate was at 8.5 ml/min.

The patient received blood pack infusion and underwent bilateral nephrostomy. Creatinine levels were improved.

Cystoscopy could not be performed because of the mass involving all the pelvis. Transrectal biopsy cores of the tumor were done.

All specimens were made of hyaline adipose tissue and were massively infiltrated by a tumor proliferation. The carcinomatous elements were composed of large cells forming compact and solid mass. The nuclei were irregular, focally nucleolus.

On immunohistochemical findings, CK20, CDX2, P504S and PSA were negative. CK7, P63, P40, Cytokeratin 5 and 6 were positive.

Histological variant of urothelial carcinoma: about a case

On the basis of these findings, the diagnosis of large cell urothelial carcinoma with epidermoid component was made. Prostatic and gastrointestinal origin were excluded.

The patient was transferred in oncology unit to begin chemotherapy regimen. Carboplatin + Gemcitabine regimen were administered.

Discussion

Squamous cell carcinoma is a rare form of bladder carcinoma. It represents 5% of bladder tumors in the United States and 75% in Egypt/Sudan.

Mixed urothelial and squamous cell carcinomas are more common than pure squamous cell carcinomas.

These tumors arise in background of chronic cystitis with squamous metaplasia, bladder exstrophy, neurogenic bladder, chronic infection, bladder stones, bladder diverticula, chronic indwelling catheters, prolonged cyclophosphamide treatment, Schistosoma Hematobium [1]. They can also be associated with smoking. Our patient's risk factor was tobacco.

The literature reports that squamous metaplasia is more common in patients with an indwelling catheter for more than ten years. As many of 80% of such patients will develop these carcinomas [2].

The specific physiopathology is still unclear but some studies have shown that squamous metaplasia is an early stage of squamous cell carcinoma [3].

Tumors can be difficult to detect because developing insidiously. Patients often complain of gross hematuria, dysuria, nocturia, frequency, pain or bacteriuria.

At cystoscopy tumors are predominantly ulcerative and involve the trigone and lateral walls.

Two thirds of cases occur in males. De novo cases are diagnosed in sixth and seventh decades but sometimes earlier in patients suffering from obstructive and irritative symptoms.

Five-year survival is 37% in pT1/pT2 stage and only 13% in pT3 stage. Metastasis occur frequently in regional nodes, bones or lungs. Prognosis is poorer in advanced disease at presentation.

In our case we did not perform cystoscopy because of the volume of the tumor.

Conclusion

Squamous cell carcinoma of the bladder is a rare malignancy, more frequent in Egypt and Sudan, associated with Schistosoma Infections. In occidental populations, chronic infection seems to be risk factor.

The prognosis of such carcinomas is poor and surgery stay the standard of cure.

Only early diagnosis and radical therapy could improve the prognosis.

Disclosure of conflict of interest

None.

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