



A Large Perivesical Mass in a Patient with the History of Bladder Cancer; Does it always Mean a Tumor Extension?

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ABSTRACT

A man with a history of urothelial carcinoma is presented here. According to investigations, he had bilateral hydronephrosis due to the pressure effect of a large mass in his bladder. The patient underwent surgical procedure including mass resection and ureter reimplantation. The final pathology report was only fat necrosis

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Introduction

Bladder cancer is accounting for 7% of all cancers. Superficial bladder cancers usually do not progress or invade adjacent organs, but high-grade or deep tumors may cause invasion.

In this case report, we had a patient with low-grade urothelial cancer developed bilateral hydronephrosis; regarding to low probability of progression in low-grade cancers, we planned for partial cystectomy.

Case Report

The patient was a 58-year-old man,

complained about a non-colicky pain in right flank from one week before admission. In urinary ultrasound evaluation, mild and severe hydronephrosis was reported in left and right kidneys, respectively; prostate volume was about 35 cc; and increased thickness of bladder wall was reported in posterior, lateral and base which was described polypoid-like in some areas. In computed tomography (CT) scan, increased thickness of right anterior bladder wall was detected; and some calcifications and vegetative mucosal lesions were detected on trigone and left wall (Figure 1). Prostate protrusion in bladder with some small stones

and bilateral moderate hydronephrosis were other findings. Serum creatinine level and bone scan were normal.

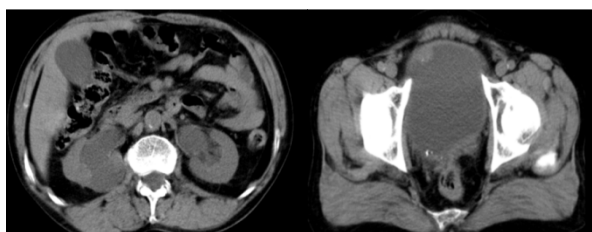


Figure 1. Computed tomography (CT) scan: bilateral hydronephrosis and tumors in bladder

We performed transurethral resection of bladder tumor (TURBT) and tried to remove numerous tumors; we did our best to remove tumor on right ureteral orifice without using coagulation.

Low-grade papillary urothelial carcinoma with focal high-grade changes was reported in pathology details and our colleagues in pathology department told us that the lamina propria and muscularis propria were not involved by tumor. So, the pathologic stage was pTa (noninvasive papillary urothelial carcinoma).

Three weeks later, he underwent re-TURBT due to high-grade foci; and we decided to insert a right-side nephrostomy due to continuous hydronephrosis in right kidney (Figure 2). The hydronephrosis in left kidney subsided. In this step, there was no remnant tumor in pathology evaluation.



Figure 2. Nephrostography: persistent right hydronephrosis

We requested nephrostography to assess the level of obstruction, and found distal part

partial obstruction in right ureter. So, he underwent exploration in the next admission, and a mass measured 5 × 10 cm located in the dome and right lateral side of the bladder was seen; the mass was resected and then, partial cystectomy (Figure 3) and right ureteroneocystostomy was done.



Figure 3. Operation image: large mass which made pressure on distal right ureter

Pathology details were as follows (Figure 4):

Sample labeled A: urinary bladder mass, partial cystectomy:

- Non-tumoral urinary bladder wall with severe fat necrosis and chronic inflammation in adventitia.

Sample labeled B: right ureter, distal portion:

- Ureteral wall with mild chronic inflammation.
- No evidence of neoplastic tissue.

Now, the patient is candidate for intravesical Bacillus Calmette-Guerin (BCG) therapy.

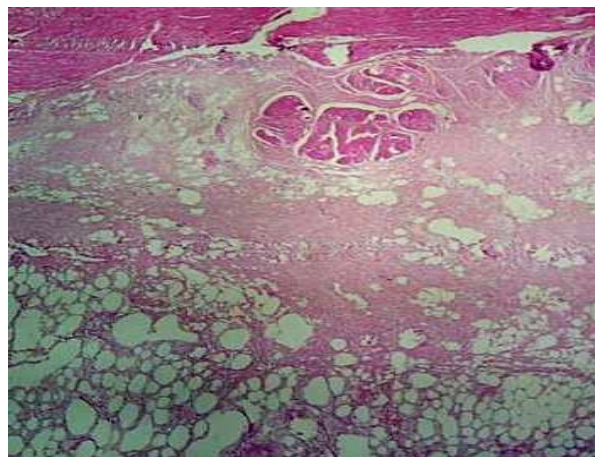


Figure 4. Pathology slide: fat necrosis

Discussion

There are reports limited reports similar to our case. In 1970, Henning and Ratledge explained perivesical fat necrosis imitated neoplasm (1).

In 1995, Mincione et al reported a woman with pseudosarcoma of the bladder. She had symptoms of cystitis and the mass rose in the left side. The tumor had extensive necrosis, involving the bladder muscle layer, and infiltrated the fat tissue around the bladder. The favorable follow-up for four years after partial cystectomy correlated with the diagnosis of pseudosarcoma (2).

In 1999, Doherty et al mentioned 12 patients with muscle invasive urothelial tumors who underwent radical cystectomy, and concluded that the extension of the fat necrosis around the bladder in patients receiving intravesical chemotherapy after TURBT is noteworthy. Although, the necrotic tissue made significantly the cystectomy more complicated technically and might even mimic extension of disease; but, this was not tolerated by the histology report of the specimens, which showed no spread of the tumor outside the bladder (3).

In 2004, Mufarrij et al explained a 76-year-old female with a history of high-grade transitional cell carcinoma (TCC) of the bladder suffering from persistent nocturia and urgency incontinence. They found a necrotic lesion in her bladder via cystoscopy.

Transurethral biopsy confirmed the benign histology, and they performed a robotic partial cystectomy with bladder reconstruction (4).

Here, we presented another case with extensive fat necrosis albeit without any malignancy. This issue is important and surgeons should be aware of such possibilities.

Conflict of Interests

Authors have no conflict of interests.

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