

Adenocarcinoma of the urinary bladder with inferior vena cava thrombus

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DESCRIPTION

Adenocarcinoma of the bladder is an unusual malignancy arising most commonly from the dome and posterior wall of the bladder. It has a male predominance seen during the sixth and seventh decade.¹ It arises from the urothelium although has a pure glandular histology.² Haematuria is the most common presenting symptom and various cystoscopic morphologies exist like solid, papillary, sessile or ulcerated. Notable risk factors for adenocarcinoma include schistosomiasis, chronic irritation, cystocele and exstrophy bladder. Adenocarcinoma of the bladder may be primary in origin or may be secondary to involvement by adjacent organs. Urachal adenocarcinoma although a separate entity is frequently grouped with bladder adenocarcinoma. No case has been ever reported in the literature of a bladder carcinoma with inferior vena cava (IVC) thrombus. This is a first case of its kind to be reported with tumour extending through the iliac veins into the IVC.

A 60-year-old man presented with haematuria and history of transurethral resection of bladder mass done elsewhere. General and physical examination revealed no positive findings and he had a poor performance status. Histopathology was suggestive of adenocarcinoma of the urinary bladder with tumour infiltrating the deep muscle. Contrast enhanced CT scan revealed 7.2×6.5 cm mass arising from the dome and the right posterolateral wall of the urinary bladder and extending into right ureter for a length of 3.5 cm causing gross hydronephrosis (figure 1). The mass was seen extending into the small bowel mesentery and the mesorectal fascia and seminal vesicles. An enhancing tumour thrombus was also seen for a length of 5.2 cm in the distal IVC extending into bilateral common iliac veins and the



Figure 2 Axial section of the thorax revealing multiple parenchymal pulmonary metastatic deposits.

right internal and external iliac veins. Metastatic work up revealed extensive lesions in the lungs and the skeleton (figure 2). Creatinine clearance of the patient improved to 70 mL/min post insertion of the nephrostomy tube. The patient was started on low-molecular weight heparin and also received palliative chemotherapy. The patient succumbed to illness 3 months after presentation.

Prevention of pulmonary embolism is of utmost priority in such patients with anticoagulation and IVC filter being the mainstay.³ Although low-molecular weight heparin is preferred with total/near total tumour thrombus or those with a bland thrombus, IVC filter may be required in patients when anticoagulation fails or is contraindicated. Treatment of the malignancy according to standard guidelines is mandated thereafter.⁴ Radical cystectomy and pelvic lymph node dissection remains the standard of care for localised disease as chemotherapy has not shown to improve outcomes in adenocarcinoma of bladder. Platinum-based chemotherapy regimens

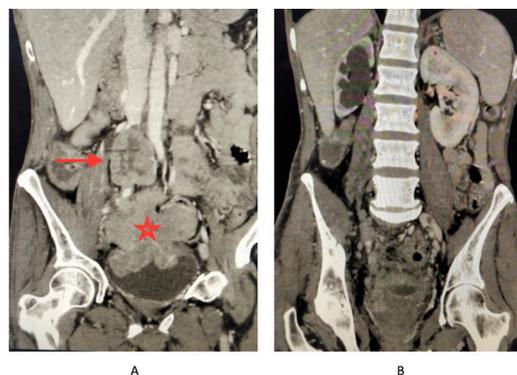


Figure 1 Coronal sections showing the bladder mass and the inferior vena cava thrombus (A) and the upstream right hydronephrosis as a result of the bladder mass and right ureteric extension (B).



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Learning points

- ▶ Primary adenocarcinomas of the urinary bladder are rare tumours and are usually detected at an advanced stage and thus have poor prognosis.
- ▶ Bladder cancers can present with inferior vena cava (IVC) thrombus with a possible route being through the internal and common iliac veins. This is the first case to be reported of a bladder carcinoma with IVC thrombus.
- ▶ Anticoagulation and prevention of pulmonary embolism remains the top priority in such cases followed by stage-based management following standard guidelines.

used against urothelial carcinoma are not effective against adenocarcinoma. Majority of patients have muscle invasive disease at presentation and prognosis remains poor with adenocarcinoma of urinary bladder having a poorer stage by stage survival outcome as compared with its urothelial counterpart.

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