

## Case Report

## Urinary Bladder Vasculitis – A Case Report

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**Abstract:** Urinary bladder vasculitis is a rare disease and it can be primary or secondary. Secondary bladder vasculitis is caused by autoimmune diseases and immunodeficiencies. Hence all other causes should be ruled out to diagnose isolated bladder vasculitis. We describe a case of vasculitis presented with lower urinary tract symptoms. This arouses strong clinical suspicion of malignancy. But histopathologic examination showed vasculitis and patient was started on steroids and he is doing well. So diagnosis of this entity is important as it determines the management of patient.

**Keywords:** Urinary bladder, vasculitis.

## INTRODUCTION

Isolated urinary bladder vasculitis is a rare disease. The main etiologies considered are autoimmune diseases and infections. Clinical symptoms of patient arouse strong suspicion about malignancy or chronic infections (Becker, A. et al., 2008). Hence biopsy is mandatory as the treatment is mainly with systemic steroids rather than surgical (Katz, D.J. et al., 2005). Always secondary causes for vasculitis should be ruled out to diagnose isolated bladder vasculitis.

## CASE PRESENTATION

Sixty one year old male patient presented with lower urinary tract symptoms, suprapubic pain and terminal dysuria for one month duration. There is no history of fever, decreased urine output, pedal edema, loss of weight, appetite or any systemic symptoms. He is hypertensive and dyslipidemic for nine years, diabetic for four years and having coronary artery disease for 8 years and is on relevant medications. There is no history of autoimmune diseases, joint pain or rashes.

On examination, his pulse rate was 78/minute, BP-150/90 mm of Hg. Per abdomen examination was within normal limits. Other systems were also within normal limits. Routine blood and urine investigations were performed. Total leukocyte count was elevated,

serum creatinine was 2mg/dl, and ESR was 40mm /1st hour.

NECT-KUB showed bilateral mild perinephric and periureteric fat stranding, bilateral hydronephrosis and ureteric dilatation. USG showed partially distended bladder with diffuse irregular wall thickening and extensive perivesical stranding, Neurogenic bladder/ chronic infection. Mild prostatomegaly was also present. Gene Xpert MTB/RIF was negative for Mycobacterium Tuberculosis.

Cystoureteroscopy showed contracted urinary bladder; whole of bladder mucosa was inflamed and congested with multiple necrotic areas. Bullous edema and large polypoidal lesions filling the bladder were seen from which multiple biopsies were taken.

Histopathology showed multiple congested and thickened vessels with fibrin thrombi, extravasated RBCs, areas of necrosis, leucocytoclasia and lymphoplasmacytic and neutrophilic inflammation. No granuloma was seen. Final diagnosis was given as ulcerated and necrotic urothelial mucosa with suppuration, edema and vasculitic changes. Advised to rule out autoimmune diseases to exclude secondary causes of bladder vasculitis.

**Follow up** – patient is doing well with steroids.

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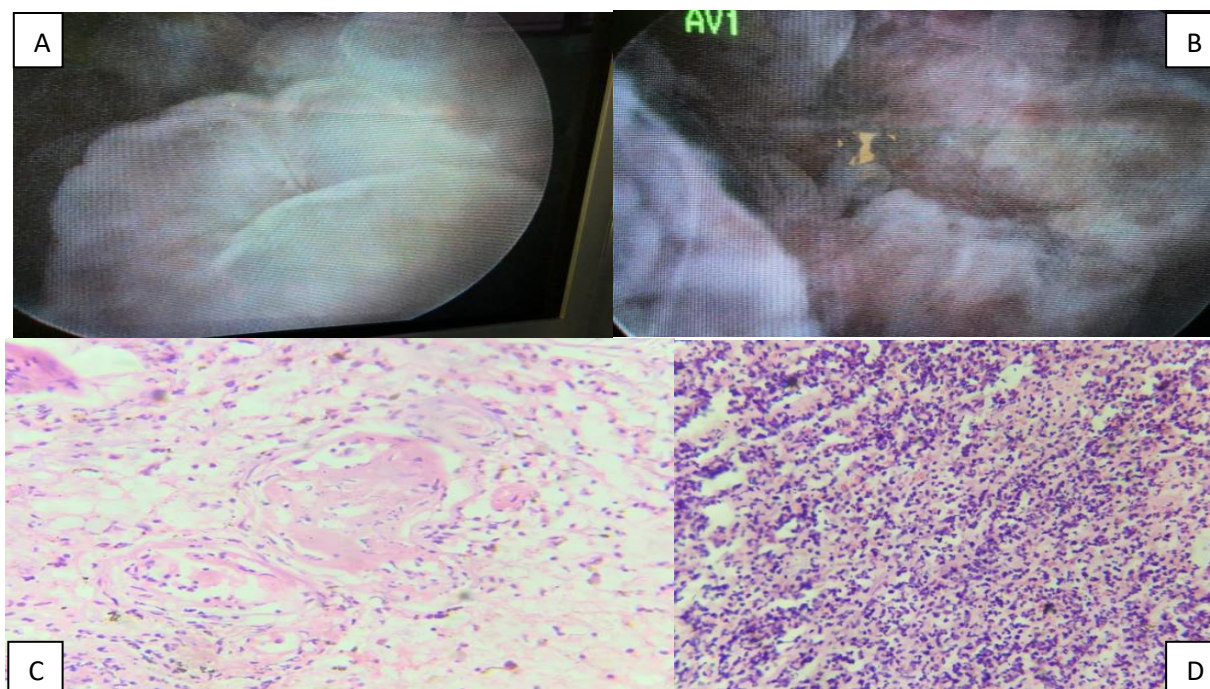
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Figures A, B- cystoscopy, C, D H&E 40X

#### DISCUSSION

Vasculitis of urinary bladder is an extremely rare disease; only 4 cases are reported in literature. Hence the pathologist looking the histology showing nonspecific findings like unexplained necrosis and inflammation should keep a potential cause of vasculitis in mind. Secondary causes like polyarteritis nodosa, Churg Strauss syndrome, Wegeners Granulomatosis and Microscopic polyangitis infections are to be ruled out (Fischer, A.H. *et al.*, 1998).

Bladder involvement by vasculitis is by indirect mechanisms like neuropathic bladder, mononeuritis and obstructive uropathy. Literature showed association of bladder vasculitis with Wegener's Granulomatosis and immunodeficiencies.

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