

An Unusual Presentation of Prostatic Tuberculous Abscess - Obstructive Lower Urinary Tract Symptoms (LUTS) with Renal Compromise in an Immunocompetent Patient

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Abstract

Isolated tuberculous prostatic abscess is very unusual phenomenon especially in immunocompetent patient. We report an unusual presentation of tuberculous prostatic abscess in young, healthy, immunocompetent patient wherein the patient developed renal compromise due to tuberculous prostatic abscess.

Introduction

Isolated tuberculous prostatic abscess is very unusual phenomenon especially in immunocompetent patient [1]. We report an unusual presentation of tuberculous prostatic abscess in young, healthy, immunocompetent patient

Case Summary

A 43 year old non diabetic, non-hypertensive male patient presented with history of on and off low grade fever, frequency, dysuria, poor stream, sense of incomplete emptying and pyuria of 7 month duration. Urine-analysis revealed plenty of white blood cells, 15-20 red blood cells, and serum creatinine of 3.9mg/dl. Ultrasound abdomen revealed bilateral grade II renal parenchymal changes with increased postvoid residual volume of 290ml (prevoid volume of 330ml). Patient denied any history of tuberculosis treatment or contact. Urethral catheterization was not successful and patient denied suprapubic catheter placement. Urine culture was negative and on Retrograde urethrogram there was posterior urethral diverticulum noted (Figure 1).



Figure 1: Retrograde Urethrogram showing prostatic urethral diverticulum.

On Cystourethroscopy his anterior urethra was unhealthy, pale and membranous urethra was erythematous and congested (Figure 2A). There was a white fluffy abscess cavity involving whole of right lobe of prostate and extending up to left lobe and

bladder neck with undermined edges, and there was elevated bladder neck. Verumontanum was prominent and standing out because of sloughed off prostatic cavity (Figure 2B,C). Biopsy specimens taken from prostatic abscess cavity (Figure 2D) and bladder and sent separately for histopathology, fungal stain and TB-PCR (tuberculous polymerase chain reaction test). Cystoscopy guided Foley catheterization was done. Urine for acid fast bacilli and malignant cytology were negative. Fungal stain and bacterial culture were negative but abscess cavity tissue for TB-PCR was positive. On histopathological examination there was necrotizing chronic granulomatous inflammation. Diagnosis of tuberculous prostatic abscess with spontaneous rupture into urethra was made and patient started on Anti-Tubercular Treatment (ATT). Per urethral catheter removed after 3 weeks. Patient completed 6 months of ATT and with a serum creatinine value of 1.6mg/dl at 6 months of follow up.

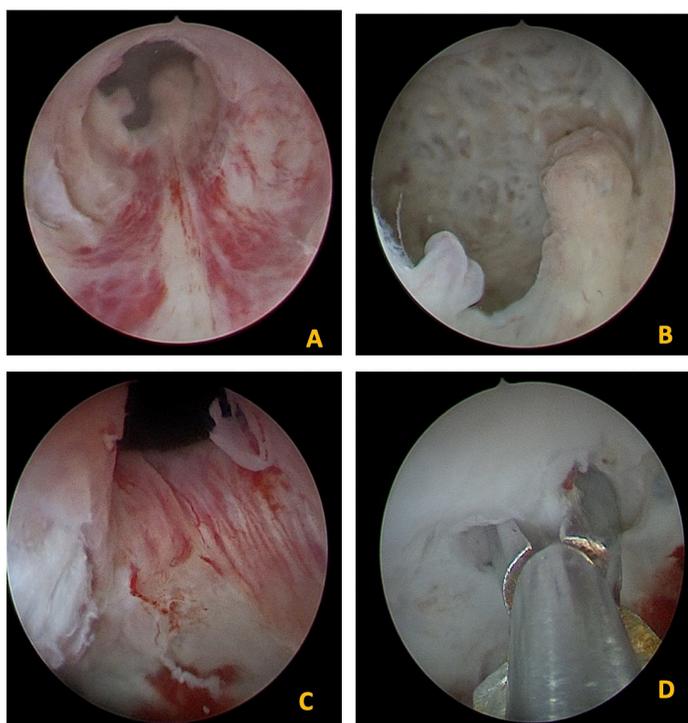


Figure 2: showing erythematous membranous urethra (A), prostatic abscess cavity (B), bladder neck elevation with undermined edges (C), and biopsy taken from abscess cavity.

Discussion

Tuberculous infection of the prostate can result from hematogenous seeding of the prostate at the time of initial primary tuberculous infection, or from urinary seeding after renal involvement or after intravesical bacillus Calmette- Guérin treatment for bladder carcinoma and commonly seen in immunocompromised patients [2,3]. Prostate tuberculosis involvement is usually asymptomatic and occur as an incidental histopathological finding after prostate surgery. Prostatic tuberculous cavities or abscesses may discharge into the surrounding tissues, or into urethra or forming sinuses or fistulae to the perineum or rectum [4].

Conclusion

Isolated tuberculous prostatic abscess with rupture into urethra and presenting as voiding LUTS and renal compromise in immunocompetent patient is a rare phenomenon and always differential diagnosis of genitourinary tuberculosis should be kept in mind when LUTS not responding to initial treatment.

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