

TUBERCULOUS PROSTATIC ABSCESS IN AN IMMUNOCOMPROMISED PATIENT

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INTRODUCTION

Genitourinary tuberculosis in developing countries comprises approximately 15-20% of extrapulmonary cases of tuberculosis.¹ Tuberculosis of the prostate is an uncommon clinical condition with less than 5% of genitourinary tuberculosis involving the prostate,^{2,3} and tuberculous prostatic abscesses are unusual presentation. The following case illustrated a case of prostatic tuberculosis abscess in an immune-compromised patient.

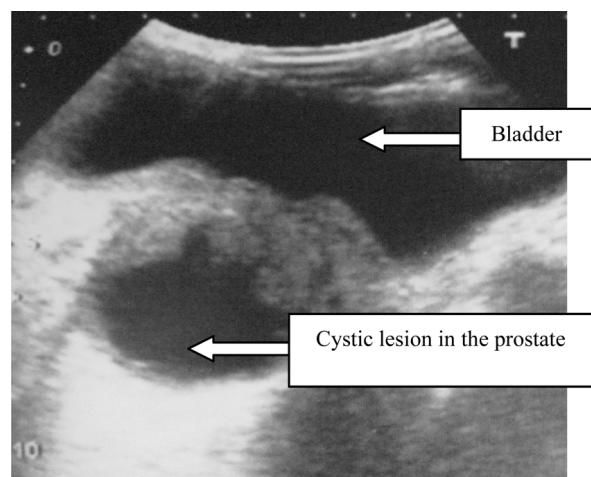
CASE REPORT

A 42-year-old male foreign worker, with limited command of local languages, presented with a six months history of poor urinary flow, frequency and urgency. Gross hematuria occurred intermittently. As these symptoms progressed, the patient developed frequent loose stools with mucus. Progressive weight loss was also observed.

Clinical examination showed a thin-looking man with angular stomatitis. There was no lymphadenopathy. Abdominal and other systemic examination was unremarkable. Digital rectal examination, however, found an enlarged, bulging and tender prostate. Leucocytes 2+ and erythrocytes 3+ were detected on urinalysis. Blood investigations showed haemoglobin level of 10.9 g/dl, low total white cell count of 2,700/mm³ (neutrophils 79%, lymphocytes 17% and monocytes 4%) and a very low PSA level of 0.04ng/ml. ESR was 99. The renal function test was within normal limits. Chest X-ray did not show any abnormality. Transabdominal (Figure 1) ultrasounds showed a small bladder and an irregular cystic lesion in the prostate.

Based on these findings, immunodeficiency was suspected. Subsequent blood tests confirmed HIV positivity with a CD4 count of 91 cells/mm³. However, the patient refused further

Figure 1



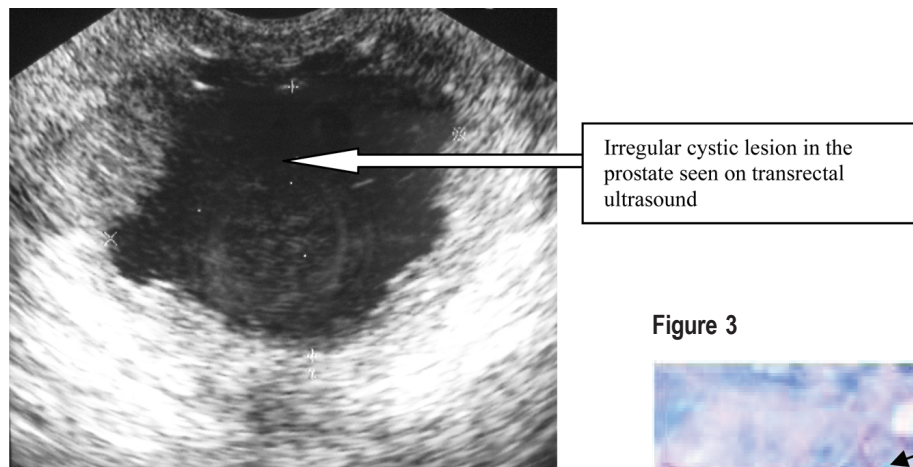
referral and intervention. He opted to seek for a second opinion elsewhere.

Four weeks later, he presented again to the primary care clinic with history of passing pus-like material in the urine. Referral was made to the urologist for further investigations.

Further investigations by transrectal (Figure 2) ultrasounds showed an irregular cystic lesion in the prostate (measuring 2.7 X 3.3 X 4.5 cm). The seminal vesicles were not enlarged. Ultrasound scan of the upper urinary tract was normal.

Cystoscopic examination demonstrated near total destruction of the prostate with a huge empty prostatic cavity and a contracted bladder. Colonoscopic examination by the gastroenterologist revealed multiple red patches throughout the colon. Biopsies of the prostatic wall (Figure 3) and colonic mucosa confirmed the presence of acid fast bacilli. Subsequent cultures confirmed mycobacterium tuberculosis. After

Figure 2



counselling, the patient was started on anti-tuberculous and anti-HIV treatment. He responded to the treatment well initially. However he decided to return to his home country for further treatment and follow up.

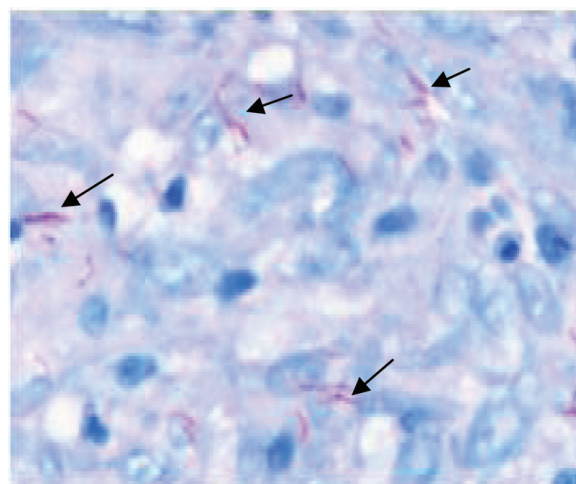
DISCUSSION

In 2008, WHO estimated that at least 11 million (and probably more than half) of the 33 million HIV-infected individuals worldwide are already infected with *M. tuberculosis*.⁴ The prevalence of extrapulmonary tuberculosis is high in HIV-infected patients. Low CD4 T-cell counts are associated with an increased frequency of extrapulmonary tuberculosis as in this patient.⁵ There is an increasing trend of HIV infection with tuberculous abscess in younger patients with no comorbid factors.⁶⁻⁸ Most patients present with irritative voiding symptoms.⁹ Only 20% to 30% of patients with genitourinary tuberculosis have a history of pulmonary infection.¹⁰ The patient illustrated in this report presented with extrapulmonary tuberculosis involving the prostate and colon. There was no obvious pulmonary involvement.

The diagnosis of prostatic abscesses is best investigated by transrectal ultrasound or CT scan.¹¹ If this shows a potentially drainable collection, transrectal ultrasound guided needle aspiration may be attempted with the fluid sent for culture and cytology. This could be therapeutic at the same time. Another way of drainage is by transurethral resection of the prostate.¹¹ In this patient, the destruction of the prostate was so advanced that even a transabdominal ultrasound could detect the abnormality with ease. This case also illustrated the usefulness of a simple ultrasound scanning in a primary care clinic. Gross abnormalities could be detected, in this case a huge prostatic lesion, and referral could be expedited.

For all forms of extrapulmonary tuberculosis, unless the organisms are known or strongly suspected to be resistant to

Figure 3



the first-line drugs, the recommended initial therapy is a six to nine months regimen (two months of isoniazid, rifampin, pyrazinamide and ethambutol, followed by four to seven months of isoniazid and rifampin).¹² HIV patients have favourable and similar response to antituberculous therapy to that of patients without HIV infection. However, adverse drug reactions are more common in HIV infected patients.¹³

In conclusion, a high index of suspicion is thus required in patient who presented with this uncommon condition. Thorough prostate and lower urinary tract evaluation should be performed in patients who present with lower urinary tract symptoms. This is particularly important where there is any suspicion of HIV infection or other immunosuppression, to avoid missing a potentially treatable infective process.

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Only one in seven diabetics had eye screening in the past one year

Goh PP, Omar MA, Yusoff AF. Diabetic eye screening in Malaysia: findings from the National Health and Morbidity Survey 2006. *Singapore Med J.* 2010;51(8):631-4.
<http://smj.sma.org.sg/5108/5108a2.pdf>

Data from the Malaysian National Health and Morbidity Survey in 2006; 55% of diabetics had never undergone an eye examination. Among patients who had undergone eye examinations, 32.8% had the last examination within the last one year.

NSAIDs use is associated with lower risk of Parkinson's disease

Gagne JJ, Power MC. Anti-inflammatory drugs and risk of Parkinson disease: A meta-analysis. *Neurology.* 2010;74(12):995-1002.

This is a systematic review of seven studies. Overall, a 15% reduction in Parkinson's disease incidence was observed among users of nonaspirin NSAIDs (relative risk [RR] 0.85, 95% confidence interval [CI] 0.77-0.94).

Proteinuria is associated with increased mortality, myocardial infarction and progression of renal impairment

Hemmelgarn BR, Manns BJ, Lloyd A, *et al.* Relation between kidney function, proteinuria, and adverse outcomes. *JAMA.* 2010;303(5):423-9.

This is a cohort study of 920 985 adults followed up for an average of three years. The risks of mortality, myocardial infarction, and progression to kidney failure associated with a given level of eGFR are independently increased in patients with higher levels of proteinuria.