

Tubercular Testicular Abscess in a Young Male-Rare Presentation of a Common Disease.

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ABSTRACT

Genitourinary tuberculosis is rare manifestation of extra pulmonary tuberculosis which itself is a fairly uncommon manifestation of a common global disease. Of these rare manifestations, we present a still rarer case of testicular tubercular abscess. We highlight the importance of testicular tuberculosis as a differential diagnosis of testicular mass / abscess and use of histopathology in clinching the diagnosis.

Keywords: tuberculosis, testicular abscess, genitor urinary tuberculosis, extra-pulmonary tuberculosis.

INTRODUCTION

Tuberculosis with its varied manifestations has been a persistent health problem that has afflicted mankind across geopolitical and time boundaries. Despite the much hyped gains achieved against the disease, it had managed to strike back with vengeance especially after the onset of AIDS. Tuberculosis can theoretically involve any organ of the body, lymph nodes being the most common site for extra-pulmonary tuberculosis.^[1] Genito urinary tuberculosis in a male is a rare manifestation of extra-pulmonary tuberculosis even amongst the developing Asian nations, and represents tuberculosis of kidney, ureters, urinary bladder, prostate, epididymis and the testes. Genitourinary tuberculosis that once was a common component of extra-pulmonary tuberculosis, now accounts for only 0.5% of it.^[2]

Male testicular tuberculosis can manifest as testicular mass or a testicular abscess.^[3]

Spread of tuberculosis to genitourinary tract is probably hematogenous and parts as epididymis are involved secondary to other parts of the genital tract.^[4,5]

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CASE REPORT

A 13 years and seven month old male child presented to the surgery emergency with complaints of progressive left testicular swelling with continuous dull aching pain that has increased in intensity over past the two days, intermittent fever with evening rise of temperature and night sweats for past three months. Patient gave history of pulmonary tuberculosis in past for which the child took anti tubercular treatment for 06 months, at the age of 08 years. On examination, the child had stable vitals and his general physical examination was essentially within normal limits. On local examination the left testis was tender and enlarged to more than twice the size of the normal right testis. Fluctuation was present and there was subcutaneous collection at the inferior part of left hemiscrotum suggesting an impending rupture [Figure 1]. The left epididymis and the spermatic cord were thickened. The child had normal development of secondary sexual characters. The routine laboratory investigations were all within normal limits [Table 1].

Chest X-ray was within normal limits.

USG and Doppler of the scrotum showed left testicular abscess destroying about 50% of the left testicular parenchyma, pyocele and impending rupture of abscess through skin.

The child was planned for scrotal exploration under spinal anesthesia. As the radiological results corroborated with our clinical findings we did not go in for testicular tumour markers in the emergency set up.

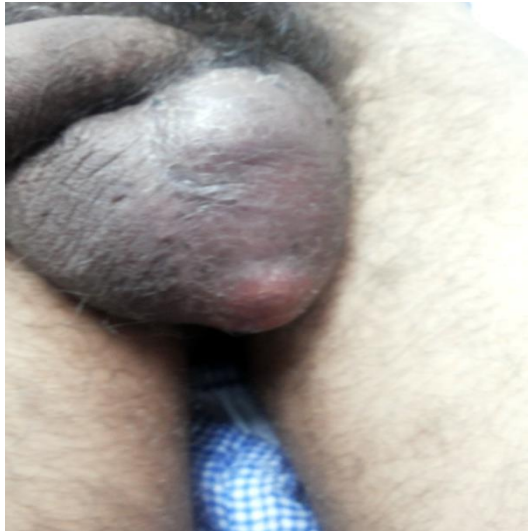


Figure 1: Preoperative status



Figure 2: surgical instruments holding dartos, tunica vaginalis and tunica albuginea on either side

Table 1: Investigations

Hb	13.1 gm%
TLC	9800/MM ³
DLC	Polymorphs 44%, lymphocytes 52%, Eosinophils 04%
Blood Urea	26 mg%
Serum creatinine	0.9 mg%
LFT	S. bilirubin(Total) 0.8 mg% SGOT/PT/ALP-30/36/98
Urine Routine	2-4 pus cells/HPF

The intraoperative findings are summarized below:

1. Left testicular abscess with impending rupture through skin inferiorly.
2. 20 ml pyocele with trans tunica albuginea communication with the testicular parenchyma. 10 ml intraparenchymal testicular collection destroying more than 50% of the left testis [Figure 2].
3. Thickened epididymis and the left spermatic cord.

Scrotum was explored in layers and dead and necrotic tissue debrided. The testis and the scrotum were kept open. Biopsy samples from the abscess cavity wall were sent for histopathology and pus samples sent for routine culture and acid fast bacilli staining. The culture showed no growth, however the pus stained positive for acid fast bacilli. Biopsy report suggested mixed inflammatory infiltrate with granuloma formation, epithelioid and plasma cells [Figure 3]. Patient was started on category II anti tubercular chemotherapy in the post operative period. The wound was managed with daily dressings and granulated well. Secondary suturing was performed on the 15th post operative day and sutures removed after another 15 days. Patient was followed up till six months post operatively and an ultrasound and Doppler study at six months showed an atrophic but viable left testis.

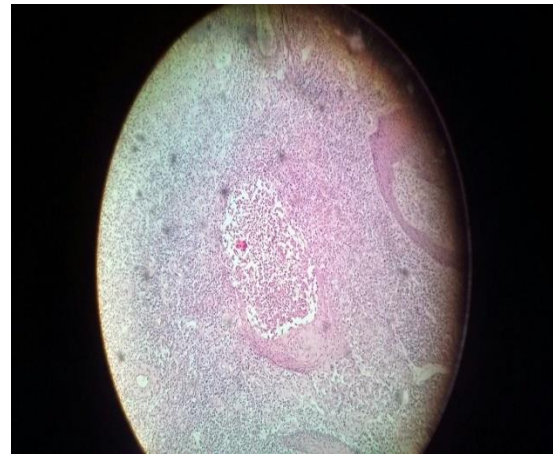


Figure 3: Histopathology showing mixed inflammatory infiltrate with granuloma formation, epithelioid and plasma cells

DISCUSSION

Tuberculosis continues infect millions of patients and is one of the single most important infectious causes of death globally.^[6] Spread of Acquired Immuno Deficiency Syndrome virus has brought the focus back on tuberculosis in the developed countries. Only estimated 5%-10% of those infected with tubercle bacilli go on to develop tuberculosis while rest of around 90% infections produce no active disease.^[7] Shugaba and colleagues had brought out presentation of testicular tuberculosis, highlighting the rarity of disease.^[8] Similar findings were highlighted by Senzaki et al in Japan.^[9] Male reproductive tract tuberculosis can manifest as testicular swelling or mass mimicking malignancy. Various modes of tubercular spread to testes have been highlighted ,

such as blood (hematogenous), retrourethral ascending infection, lymphatic or direct spread.^[10] Anti tubercular chemotherapy is the treatment of choice for testicular tubercular mass but surgery is advised for non responders or in case of abscess formation. Here in a young male we decided against orchidectomy and successfully went for testis sparing surgery.

CONCLUSION

Testicular tuberculosis is a rare manifestation of tuberculosis but should always be considered as differential diagnosis in each case of testicular abscess/ mass. A confirmatory diagnosis is very difficult without histopathology and hence biopsy samples should always be sent.

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