Case Report **IJCR (2020) 4:178**

International Journal of Case Reports (ISSN:2572-8776)

TUBERCULOSIS MIMICKING A TESTICULAR TUMOR

Menaka Thilakarathna[1*], Sasanka Wijayawardhane[1], Aflah Sadikeen[1], Amitha Fernando[1]

[1]National Hospital of Sri Lanka.

ABSTRACT

Genitourinary tuberculosis is a challenging clinical entity which can affect the entire male genital tract.

Seventy-five- year old male presented with a testicular lump masquerading a testicular malignancy. Histological and microbiological examination of testicular biopsy specimens established the diagnosis of tuberculosis.

Isolated testicular tuberculosis is rarely reported. High degree of clinical suspicion and histological sampling are paramount important in the process of diagnostic evaluation.

Keywords: Extra pulmonary tuberculosis; Testicular tuberculosis

***Correspondence to Author:**
Menaka Thilakarathna
National Hospital of Sri Lanka.

How to cite this article:
Menaka Thilakarathna, Sasanka Wijayawardhane, Aflah Sadikeen, Amitha Fernando. TUBERCULOSIS MIMICKING A TESTICULAR TUMOR. International Journal of Case Reports, 2020; 4:178.

eSciPub LLC, Houston, TX USA.
Website: http://escipub.com/

INTRODUCTION

Tuberculosis (TB) is a common chronic granulomatous infection, which primarily affects lungs. Extrapulmonary organ involvement is seen in around 10-15% of the cases. TB lymphadenitis and TB pleural effusions are the commonest forms of extrapulmonary TB. Genitourinary TB is an uncommon entity. Testicular involvement is seen only in 3% of the cases of genitourinary TB [1]. In most of the cases of testicular TB other organs of the genitourinary system, particularly kidneys and ureters are found to be affected. Isolated testicular TB is an extremely rare manifestation of TB. Testicular TB usually presents with a testicular lump, which may or may not be painful, commonly mimicking a testicular neoplasm. Discharging sinuses and skin ulceration of the scrotum are the other manifestations. Ultrasound guided fine needle aspiration is the main method to establish the histological diagnosis. Testicular biopsy is needed in some patients, to safely rule out the possibility of a testicular carcinoma. This is particularly important in elderly age group, where testicular malignancies are fairly common. Standard anti-TB treatment with Isoniazid, Rifampicin, Pyrazinamide and Ethambutol, is the main modality of treatment. Here, we report a case of isolated testicular-TB in a Sri Lankan man.

CASE REPORT

Seventy-five-year-old, previously well man presented with right sided testicular pain for three months. He denied any history of fever or urinary symptoms. There was no history of cough, constitutional symptoms or loss of weight. There was no contact history of TB. His BMI was 26 kg/m^2. He was afebrile and not pale. There was no lymphadenopathy. Respiratory and cardiovascular systems were clinically normal. Abdominal examination did not reveal any organomegaly. Scrotal examination revealed a tender, firm swelling measuring 2×1 cm in the lower pole of the right testis. Overlying skin was normal.

Complete blood count and C-reactive protein levels were normal. Erythrocyte Sedimentation Ratio (ESR) was 50 mm/1st hour. Chest radiograph was normal. Tuberculin skin test was positive with an induration of 13mm. Ultrasound scan of the scrotum revealed a mass measuring 2×2 cm in size in the lower pole of the right testis, extending into and involving the scrotal skin. Abdomen and pelvis were ultrasonically normal without evidence of hydroureter, hydronephrosis, perinephric collections or prostatomegaly. Urinalysis was normal. Serum beta HCG and alpha feto protein levels were within normal ranges. Retroviral screening was negative. Surgical exploration of the right testis and right orchidectomy performed due to the high degree of suspicion of a testicular malignancy. Histology revealed granulomatous inflammation with caseous necrosis involving testis associated with abscess formation in the scrotal skin. Acid fast bacilli were present on staining with Ziehl-Neelson staining of biopsy samples. The diagnosis of isolated testicular TB was made. He was started on category I anti-TB treatment. He made a good recovery with treatment.

DISCUSSION

Genital TB is a disease with male preponderance. Epididymis is the commonest male genital organ to be involved. Tuberculosis of prostate, seminal vesicles and testis are also reported [2]. Entrance of Mycobacterium tuberculous bacilli into testis and other genital organs is usually from infected urine via retrograde reflux [3]. Hematogenous spread is rare. Therefore, isolated testicular involvement without renal or ureteric TB, like in above described case, is a rarely reported condition.

Our patient presented with unilateral painful testicular swelling. Testicular torsion, infective orchitis and neoplastic lesions like seminoma or lymphoma are the initial differential diagnosis. Ultrasonography with color doppler is the investigation of choice to differentiate testicular torsion from others, where testicular blood flow is greatly diminished. Fine needle aspiration is usually adequate to establish the diagnosis of TB- orchitis. It is particularly suitable in young patients. Our patient is an elderly gentleman where complete ruling out of testicular tumor is paramount important. Therefore, testicular exploration and biopsy performed. Isolation of acid-

fast bacilli from testicular biopsy specimen, as in this case is extremely rare, particularly in isolated testicular TB.

Standard anti-TB regime is highly effective in testicular TB also. Isoniazid, Rifampicin, Pyrazinamide and Ethambutol for initial two months and Isoniazid and Rifampicin for next four months is regime recommended to achieve the full recovery of the infection [4].

REFERENCES

[1] Viveiros F, Tente D, Espiridião P, Carvalho A, Duarte R. Testicular tuberculosis: Case report. Rev Port Pneumol 2009; 15:1193-7.

[2] Gurubacharya RL, Gurubacharya SM. A 14-year-old boy with isolated tuberculous orchitis. J Nepal Paediatr Soc 2009; 29:30-2.

[3] Wise GJ, Shteynshlyuger A. An update on lower urinary tract tuberculosis. Curr Urol Rep 2008; 9:305-13.

[4] Hadadi A, Pourmand G, Mehdipour-Aghabagher B. Unilateral testicular tuberculosis: Case report. Andrologia 2012; 44:70-2.