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# AN UNUSUAL PRESENTATION OF PRIMARY SCROTAL TUBERCULOSIS

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Article Info	ABSTRACT
Received 15/11/2015 Revised 27/11/2015 Accepted 12/12/2015	Isolated scrotal lesion is an uncommon presentation of tuberculosis. We report a case of left sided scrotal swelling due to tuberculosis in a young male patient. The diagnosis was suspected on clinical examination and ultrasound of scrotum. Patient underwent surgery and the diagnosis was confirmed by histological examination of cystic mass. Patient improved after taking antitubercular treatment.
<b>Key words:</b> Isolated scrotal lesion.	

## INTRODUCTION

The genitourinary tract is the most common site of extra pulmonary involvement by tuberculosis (TB) [1]. The most common side of genital TB is the epididymis, followed by the seminal vesicles, prostate, testis, and the vas deferens [2].

However, in our knowledge a primitive scrotal localization has only been reported in the literature four times previously.

We present a rare case of primitive genital tuberculosis localized in the scrotum. We discuss the physiopathology, epidemiology, clinical and therapeutic aspects of this disease through the study of this case and a review of the literature.

## CASE REPORT

A 31-year old patient was present to our services with increasing redness and painless swelling of the Left scrotum with 6 months duration. He was no history of systemic symptoms, pulmonary tuberculosis, epididymitis, lower urinary tract symptoms, trauma, medical treatment or infertility.

Physical examination revealed an enlarged and painless left testicle while epididymis and spermatic cord were normal to palpation. The overlying scrotal skin showed no sign of inflammation, the right testis and cord were normal and lymph nodes were not palpable. Prostate was also found normal during rectal examination. Clinical examination of chest and the abdomen were normal.

Complete blood count, biochemistry tests and tests for serum tumour markers including LDH, alphafetoprotein and beta-human chorionic gonadotropin were all within normal levels. Urine analysis was normal without pyuria. Urine culture was negative. The patient was not immunocompromised, and he did not have the human immunodeficiency virus. Chest X-ray was clear.

Scrotal ultrasound found two lesions of the lower pole of the left testis (4\*3 cm and 2.9\*2.1 cm) with cystic and solid components and normal epididymis. The right testis and epididymis were normal [Fig 1].

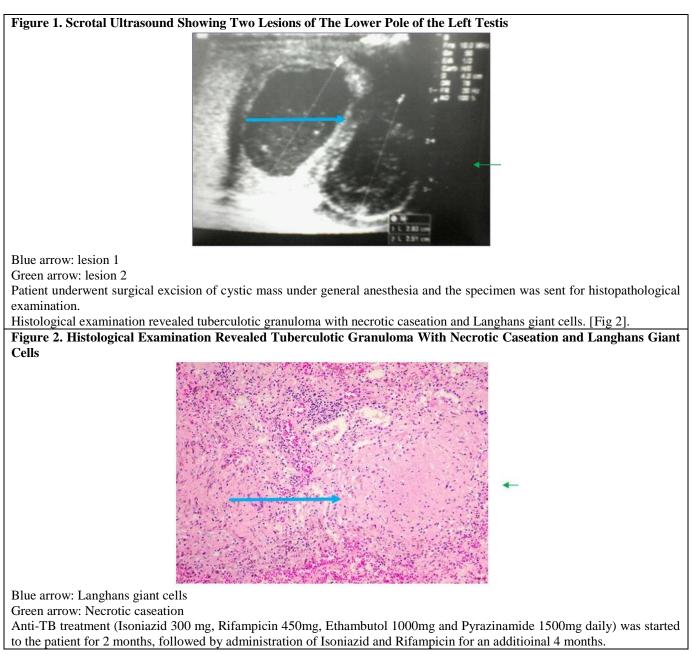
#### DISCUSSION

TB remains one of the leading infectious diseases worldwide [3][4]. The incidence of genital TB (included prostate gland seminal vesicle, and testis) in men was reported to account for0.43–15% of extra pulmonary TB [5]. Isolated genital tuberculosis is very rare and usually presents with concomitant kidney and/or lung disease [6]. Primary scrotal TB is an extremely rare condition and it



may mimic viral orchitis, epididymitis, hydrocele, spermatocele, testicular torsion, scrotal trauma or tumor [7]. The Mycobacterium Tuberculosis (MT) bacillus is disseminated by way of the bloodstream from a pulmonary focal point to genitourinary tissues causing infection in the kidney, epididymis, testis, prostate, and seminal vesicles. Primary lesions cause granulomas that remain viable for decades and can be reactivated from a granuloma after a large period of inactivity[8]. TB often affects the lower genitourinary system rather than the kidney. The epididymis is the commonest structure to be involved, followed by the seminal vesicles, prostate, testis, and the vas deferens [9]. Ultrasonography is currently the best technique for imaging the male genital system. Ultrasonography of scrotum was reported to be helpful in assessing of testicular and extra testicular lesions [10]. The diagnostic of scrotal Tb is confirmed by biopsy of the scrotal lump for pathology study when granulomas are found in the histopathological specimens. Differential diagnosis should be made with Mycobacterium bovis and atypical mycobacteria such as M. kansasii, M. leprae, M. avium, and M. fortuitum. In order to make diagnosis it is essential to have clinical, pathological, and microbiological findings [11].

Patients should be treated with initial antituberculosis regimen based on rifampicin, isoniazid, pyrazinamide and ethambutol for two months and then with rifampicin and isoniazid for 6 months [12].



#### CONCLUSION

TB remains one of the leading infectious diseases worldwide. The physician is not easily oriented by clinical symptoms to suspecting TB. Nevertheless it should be one of the obligatory differential diagnoses in any patient presenting with atypical uro genital symptoms. Opportune diagnosis is important so that useless and costly treatments can be avoided as well as surgical procedures that have no diagnostic support, allowing the patient's symptoms to be resolved solely through anti tuberculosis treatment.

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#### CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

### STATEMENT OF HUMAN AND ANIMAL RIGHTS

All procedures performed in human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This article does not contain any studies with animals performed by any of the authors.

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