

CASE REPORT

Isolated Tuberculous Orchitis: A Mimicker of Testicular Malignancy

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ABSTRACT

BACKGROUND: Isolated tuberculous orchitis is a rare entity and one of the most important manifestation of Genital TB (Tuberculosis). In this report, I present a case of tuberculous involvement of the testis which closely resembles as a testicular tumour. A 28 years old male patient presented with unilateral testicular swelling of two months duration. As the clinical evaluation was suggestive of testicular malignancy, he underwent a right sided high inguinal orchidectomy. The histopathology report revealed isolated tuberculous orchitis without epididymal involvement.

Key Words: Tuberculosis, Tuberculous orchitis, Genital TB (Tuberculosis), Testicular malignancy, Orchidectomy

CASE REPORT

A 28 years old male presented with a painless swelling of the right testis of two months duration. He had recurrent on and off low-grade fever for the past 1 month, not associated with chills or rigor. He did not have any loin pain or bothersome voiding difficulties. He was not treated for TB in the past nor did he have a family history of TB. There was no trauma to the scrotum. The general examination was unremarkable. Upon local examination, there was an 6 X 4 cms sized hard and non-tender single swelling in the right scrotum with testis not separately palpable, impulse on coughing was absent. Fluctuation and transillumination tests were negative. The left testis, both epididymes and the cord structures were clinically normal. The Blood investigations were within normal range.

The chest X-ray was normal. An ultrasonogram of the scrotum revealed a hypoechoic lesion in the right testis with possibilities of mass lesion in right testis. The left testis and both epididymes were normal. An ultrasound examination of the abdomen was normal. A clinical diagnosis of testicular tumor was made and the patient underwent a right sided high inguinal orchidectomy and the specimen was sent for histopathological examination. Histopathological examination revealed testicular tissue with multiple well formed granuloma with caseous necrosis and Langhans type of giant cell. The sections from intermediate area of spermatic cord and proximal surgical margin show congestion, haemorrhage and mononuclear inflammatory infiltrate. Ziehl Nelson stain does not show acid fast bacilli. All histological features were suggestive of **Tuberculous Orchitis:** Histopathology report confirmed the diagnosis and antitubercular therapy was started as category 1 regimen of Isoniazid, Rifampin, Pyrazinamide and Ethambutol for 6 months as per RNTCP guidelines.

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Figure 1: Histopathology image showing seminiferous tubules with caseous necrosis



DISCUSSION

Tuberculosis is an endemic disease in India. It may involve any organ or system in the body. About 27% patients present with isolated genital involvement worldwide and in India its incidence is about 18%. Genitourinary TB is the second most common site of involvement among extra-pulmonary TB. The usual site of involvement is the epididymis, which occurs haematogenously or by a retrocanalicular haematogenous pathway from an infected prostate. If the infection goes unchecked, it can involve the testis. But, isolated involvement of testis is very rare. The possible etiology of isolated tuberculous orchitis is that rarely the infection of the testis could be by hematogenous route rather than the usual direct extension from the epididymis. In one reported case of isolated TB orchitis, the patient presented with scrotal ulceration. Kundu *et al*, have reported a case of testicular TB diagnosed by fine needle aspiration cytology. The lesion regressed with antituberculous treatment.⁸ Kumar *et al*, have reported a case of acquired

immunodeficiency syndrome (AIDS) presenting as testicular TB.

CONCLUSION

I want to convey the message that, in the atypical age group of patient presenting with testicular swelling from endemic areas of tuberculosis, an infective etiology should be considered.

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