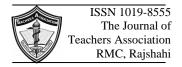
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## **Case Report**

# Isolated Epididymal Tuberculosis : A Case Report

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#### Abstract

Isolated tubercular epididymitis is not a very common pathological entity. Tuberculosis of the epididymis is usually associated with infection of the ipselateral testis. More over it usually presented in early adult age group. Here we are communicating an isolated right epididymal tuberculosis in a sixty eight years old man. The diagnosis was suspected on clinical examination and ultrasonogram scanning of the testes and epididymis, was supported by FNAC study of the scrotal swelling and was confirmed by histopathological examination of excised lump following surgical exploration.

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#### Introduction

Despite modern anti-tubercular chemotherapy, tuberculosis of genitourinary system remains a threat to the general population, specially in the developing countries like Bangladesh. About 30% cases of extra-pulmonary tuberculosis involve the urogenital tract in adults<sup>1</sup>. Approximately 28% of patients with genitourinary tuberculosis involves solely genital organs of which isolated epididymoorchitis is an uncommon presentation. Isolated tuberculous lesion of epidiymis is more uncommon and may produce diagnostic dilemma<sup>2</sup>. The study of reported communications suggests that this disease is more common in the adulthood with highest incidence in between 20 to 50 years.<sup>3</sup>

The present communication describes a case of isolated epididymal tuberculosis in an old man with a complete family at the age of 68 years without

involvement the testis and with no evidence of tuberculous foci elsewhere in the body.

### **Case report**

A 68 years old male retired government servant presented with pain and swelling in the right scrotum for three months. He gave history of small nodular swelling on the right testicular region three months back which became gradually enlarged and painful. He did not complain of any urological problem like dysuria, frequency, urgency and had no history of sexually transmitted disease. His past medical history was also uneventful. The patient is a smoker with normal retired lifestyle. He has also an active sexual life with his wife. His wife is healthy and has no evidence of chronic diseases.

On general examination, no significant deviation could be detected. Local examination revealed a mass

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on the right epididymis. The lesion was 2.5X 2.0X 1.0 cm in size having no involvement of skin. The testis was not involved in the lesion at least clinically. The mass was firm but irregular and tender.

On investigation both haematological and biochemical parameters were found to be within normal limit. Ultrasonography revealed nodular lesion in the head of the right epididymis and right spermatic cord most likely to be a chronic inflammatory lesion. The prostate, urinary bladder and both kidneys were normal in appearance with no evidence of pelvic and para-aortic lymphadenopathy. The overall picture was suggestive of acute on chronic epididymitis. FNAC suggested granulomatous inflammation with probability of tuberculosis.

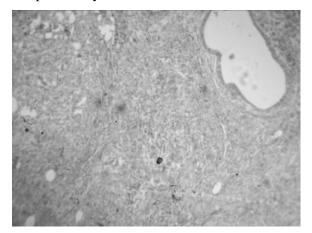


Fig. Photomicrograph of Histological slide with Epididymal Tuberculosis.

On 09/03/2011 the patient underwent surgical intervention. The right epididymal swelling was completely excised and sent for histopathological examination. The histopathological examination showed well defined granuloma which are composed of langhans type of giant cells, lymphocytic aggregation and area of necrosis (Fig. 1). No malignancy was seen. Granoulomatous inflammation was consistent with tuberculosis. The confirmed diagnosis was tuberculosis of right epididymis. Postoperative period was uneventful. However the patient had been thoroughly investigated for tuberculous lesions elsewhere in the body without any positive outcome. Chest X-ray, abdominal ultrasonogram was normal. And so the case was diagnosed finally as an isolated tuberculosis of right epididymis. Classical antitubercular chemotherapy with Rifampicin, Isoniazid, Ethambutal and Pyrazinamide was started on discharge. On three months post-operative follow up the patient was found to be healthy.

### Discussion

Genital tuberculosis is usually a diseases of sexually active males and occurs most commonly between the ages of 20 years and 50 years<sup>3</sup>. It has also been reported in children<sup>4</sup>. However epididymal tuberculosis in old age is not common. Interestingly enough our patient is an old man of 68 years. Tubercle bacilli may reach the epididymis by three routes such as, haematogenous route, lymphatic route and/or descent from the kidneys with retrograde spread via vas deferens<sup>5</sup>. In case under consideration we could not ascertain any route of dissemination of tuberculosis.

Genital tuberculosis commonly presents as a scrotal swelling, pain, discharge and sinuses. The presence of abscess or sinus formation indicates advanced widespread scrotal disease<sup>3</sup>. The urinary symptoms and sterile pyuria strongly suggests renal involvement which was not evident in our case. However the patient in this communication presented with epididymal swelling without any history of urinary symptoms, discharge or sinus.

FNAC is a less invasive procedure which can help in diagnosing male genital tuberculosis. It can be diagnosed by detecting acid fast bacilli or granuloma in the smear<sup>6</sup>. In our case FNAC suggested granulomatous inflammation with probability tuberculosis. Definitely this suggestion helped us to plan treatment.

Our case demonstrates unusual presentation of genital tuberculosis with no evidence of associated pulmonary or renal tuberculosis. So a diagnosis of an isolated tubercular epidimytis could be made with confidence. We conclude that tuberculous epididymitis must be considered in the differential diagnosis of a scrotal swelling specially in an endemic zone like Bangladesh. All attempts must be made for early diagnosis and treatment of this condition to avoid unnecessary epididymectomy with its consequences on fertility.

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