



Original Research Article

Genitourinary tuberculosis presented with an unusual form of solitary epididymitis

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ABSTRACT

Keywords

Genitourinary tuberculosis, epididymitis, pus, urine

Genitourinary tuberculosis (GUTB) being the second common form of extra pulmonary tuberculosis is encountered in males between 30-50 years of age. The present case of GUTB in a 31 year old was identified by AFB culture of pus drained from the affected epididymis and also from urine sample. Timely laboratory investigations, identification of the causative agent, confirmation of the same from TRC and treatment of the same revealed recovery from the disease to be successful.

Introduction

Genitourinary tuberculosis (GUTB) is the second common form of extra pulmonary tuberculosis after lymph node involvement [1]. According to WHO the GUTB accounts for less than 5% of all the patients with extra – pulmonary tuberculosis [2]. In India the incidence of GUTB is nearly about 18% [3]. In man, epididymitis is most common extra pulmonary tuberculosis seen and the same is followed by prostate[4]. Isolated epididymo-orchitis is an unusual presentation of tuberculosis and may produce diagnostic difficulty while excluding a possible testicular neoplasm [5]. Timely diagnosis and treatment will prevent the sequelae of this infection[6].

However, at present a case of isolated tuberculous epididymitis without involvement of the testis in a young healthy male is being reported.

Materials and Methods

A 31 year old apparently healthy male with H/O on and off fever since six months occasionally associated with chills approached the Dept of Medicine (OPD), M.S. Ramaiah Medical teaching Hospital, Bangalore, India. The patient also complained of fatigue with history of swelling in the left testis since two months. Past history also revealed that patient was admitted for fever and was given a course of anti biotics. Later he observed a swelling in the left testis associated with dragging kind of pain with no history of dysuria, frequency, and urgency of micturition. On examination, the left epididymis was found to be enlarged with 2 x 2 mm nodule being hard in consistency. Right epididymis, right and left testis were normal. The systemic examination was essentially normal. Investigation revealed Hb – 15.3g% ,TC – 6,600/cu mm, Differential count -

Neutrophils-60%, Lymphocytes-32%, Eosinophils-03%, Monocytes-5%. ESR-128mm/hr, random blood sugar-76mg/dl. Routine urine examination showed albumin 4+. Microscopic examination showed two to four epithelial cells and numerous pus cells / HPF. No malarial parasite/micro filarial was seen in the peripheral smear. Widal, HIV, HBsAg were negative. Mantoux showed 9 x 9 mm after 48 hrs. No sonological abnormality of liver, gall bladder, pancreas, spleen, para-aortic region, kidney, urinary bladder and prostate was seen. Chest x-ray was normal. Patient was admitted for evaluation of cause of PUO and investigations with respect to the same were negative with persistent ESR.

Scrotal ultra sound of both the testis were normal in shape, position, echo texture. Right testis measured 41x24 mm and left testis measured 39x24 mm. Left epididymis measures 28x 14mm. Head of the left epididymis measured 15 mm in size and was mildly enlarged. Head of the right epididymis measured 12 mm and was normal. Impression revealed left epididymitis with a small focal abscess. Under local anaesthesia incision and drainage was done from left epididymis and 0.5-1 ml of purulent pus and urine was sent for investigations. Gram's stain showed numerous inflammatory cells with absence of organisms, Zeihl Neelsen's stain was negative for acid fast bacilli. Routine culture yielded no growth after 48 hrs of incubation. Direct microscopy of urine also showed numerous inflammatory cells/HPF. Urine albumin was 4+ and no acid fast bacilli were seen in ZN stain. Patient was started with a course of cefataxime for 14 days and cefinox 200mg for seven days. However, Mycobacterium tuberculosis was grown on Lowenstein-Jensen media after seven weeks and urine also showed growth of M Tuberculosis after eight weeks and

growth was confirmed at TRC Chennai. Patient was referred to DOTS Centre and started with category –I anti tubercular treatment.

Results and Discussion

Genital tuberculosis commonly presents as unilateral scrotal swelling, pain, discharging sinuses. Tubercular epididymis or epididymo –orchitis must be considered in the differential diagnosis of scrotal swelling apart from testicular tumors acute inflammation, infarction and inflammatory orchitis[7].

The primary organ affected in urinary tract infection is kidney. Renal involvement is usually slow, progressive and destructive which may lead to unilateral loss and renal failure[6]. Urogenital tuberculosis more commonly seen in males between 30-50 years of age. Male genital tuberculosis is usually associated with renal tuberculosis in 60-65 % of cases or with pulmonary tuberculosis in approximately 34% of cases[8].

In the present case the patient was aged 31 years and presented only with pain and swelling in the left testis for the past two months. The chest x-ray was normal with no sonological abnormalities in the kidneys, although IV pyelogram and computerised tomography were not done in the patient. Further, the picture of urine and pus AFB culture being positive for M Tuberculosis as well as urinary albumin revealing 4 + without any clinical symptoms of urinary tract infection not only indicates early involvement of kidney but also confirmed the patient to be suffering from genito urinary tuberculosis. Reports does put forth that tuberculosis of the epididymis could be haematogenous spread from the kidney and hence early and accurate diagnosis of genital

tuberculosis helps in preventing complications . In the present case early diagnosis of genitourinary tuberculosis was made and was referred to RNTCP of our centre. Category I ATT regime was started and successfully recovery following the treatment was seen.

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