

## CASE REPORT

### TUBERCULAR SUPPURATIVE VASITIS PRESENTED AS AN INGUINAL MASS: A RARE CASE REPORT

Kavimozhy Ilakkiya<sup>1</sup>, Venu Gopal<sup>2</sup>, Naresh Kumar<sup>3</sup>, Aravind<sup>4</sup>, Marudhavanan<sup>5</sup>

#### HOW TO CITE THIS ARTICLE:

Kavimozhy Ilakkiya, Venu Gopal, Naresh Kumar, Aravind, Marudhavanan. "Tubercular Suppurative Vasitis Presented as an Inguinal Mass: A Rare Case Report". Journal of Evolution of Medical and Dental Sciences 2015; Vol. 4, Issue 54, July 06; Page: 9507-9510, DOI: 10.14260/jemds/2015/1375

**ABSTRACT:** We report a case of suppurative vasitis that presented as an inguinal mass in an elderly man. Infectious vasitis, while rarely reported in the literature, is thought to be caused by *Escherichia coli*, mycobacteria causing tuberculosis, and other rare urogenital pathogens such as *Haemophilus influenzae*. We report a case of tuberculous vasitis occurring as a primary infectious suppurative vasitis is rare and presenting as an inguinal mass is unusual. Only, very few cases were reported in literature with such presentation.

**KEYWORDS:** Suppurative vasitis, Male genital tuberculosis, Inguinal mass.

**INTRODUCTION:** Genitourinary tuberculosis (GUTB) is the second most common form of extrapulmonary tuberculosis after lymph node involvement.<sup>1</sup> It comprises 30% of non-pulmonary TB.<sup>2</sup> In approximately 28% of patients with GUTB, the involvement is solely genital.<sup>3</sup> The most frequently affected sites within the GU tract being the epididymis (42%), seminal vesicles (23%), prostate (21%), testes (15%) and vas deferens (12%) in males, and the fallopian tubes in females.<sup>4,5</sup> Vasitis or inflammation of the vas deferens is a rarely described condition categorized by Chan & Schlegel.<sup>6</sup> Infectious vasitis, while rarely reported in the literature, is thought to be caused by common urinary tract pathogen. Pathogens causing infectious vasitis include common urinary tract pathogens such as *Escherichia coli*, mycobacteria causing tuberculosis, and other rare urogenital pathogens such as *Haemophilus influenzae*. Tuberculosis of the vas deferens usually associated with secondary changes in the cord representing a chronic illness. Suppuration is rare. The clinical and radiological features of genitourinary tuberculosis may mimic those of many diseases. A high index of suspicion is required, especially in endemic area. We report a case of tuberculous vasitis occurring as a primary infectious suppurative vasitis is rare and presenting as an inguinal mass is unusual.<sup>7</sup> Only, very few cases were reported in literature with such presentation.

**CASE REPORT:** A 60 year male complained of a painful swelling in the right groin of one month duration. No history of trauma or fever. Venereal infection of any kind was denied. No history of urinary symptoms. No past history of tuberculosis. He was married and has two children. Clinical examination revealed a firm tender, non-fluctuant swelling in the right groin, cylindrical in shape and corresponding to the shape, extent and direction of the spermatic cord. Cough impulse was absent. The right testis, epididymis and cord felt normal and no abnormality detected in left side. The remainder of clinical examination including rectal examination was unremarkable. There was no urethral discharge. Systemic examination was normal. Differential diagnosis of funiculitis, incarcerated hernia and the infected encysted hydrocele of the cord was made. Haematological indices demonstrated mild neutrophilia. The urine was not purulent and no organism was demonstrable on culture. His HIV, VDRL testing's were negative.

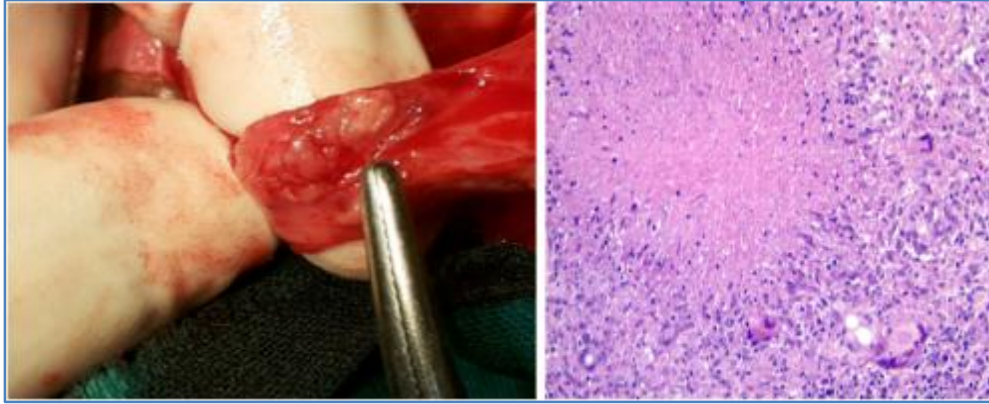
## CASE REPORT

---

Chest X-ray was within normal limits. Ultrasound reported as funiculitis and no abnormality of the epididymis, testis, scrotal vas, prostate and kidney was made. Initially patient was managed with antibiotics. As there was no improvement with medical management, groin exploration was performed. When opened the inguinal canal, an inflammatory mass of size 3\*2cm was present medially over the rectus. Surprisingly, when incised the same, drained 15ml of frank pus. Except for the vas with multiple granulomatous nodules over the inguinal part, the remaining spermatic cord structures appeared normal. No indirect sac was found. The part of the vas with the nodule was excised along with the biopsy from the inflammatory mass were sent for histopathological examination. The vas was also expressing active pus. The pus sent for microbiological examination. Drain was fixed and wound closed in layers. Smears from the pus showed acid fast bacilli. The Histopathological examination reported as caseating granulomatous lesion suggestive of tuberculosis. Patient was started on ATT. At the end of the second week the patient was discharged.

**DISCUSSION:** GUTB is still a major health problem in many developing countries including India. In India, the incidence of genital TB is nearly about 18%. Urogenital tuberculosis affects all age ranges, with predominance of males<sup>8</sup>. We reported in a 60 year male. A commonly encountered clinical entity, and the rarely described efferent ductule inflammation namely, vasitis. Vasitis is rarely reported as an isolated condition. Only 6 cases of primary infectious vasitis has been described in medical journals since 1933.<sup>7,10,11,12</sup> Infectious vasitis presenting with painful groin mass is an unusual presentation.<sup>7,10,11,12</sup> Ours is a rare case report of tuberculous vasitis presenting as an unusual groin mass. We considered incarcerated hernia as one of the differential but a prime diagnosis in our case. It is not surprising that all previous reported cases of infectious vasitis underwent surgical intervention,<sup>7,9,10,11</sup> except for two cases. It's very difficult to differentiate between incarcerated inguinal hernia and vasitis,<sup>1</sup> as ultrasound features of both are similar on imaging.<sup>13,14</sup> In view of nonresolving groin mass and persistence of patient symptom even after antibiotic treatment, surgical exploration was performed in our case. It has been recognised that failure to respond to conventional antibiotic therapy strongly suggest tubercular etiology.<sup>15</sup> However surgery may be required in severe cases to deal with abscesses, obstructive symptoms, or failure of chemotherapy.<sup>16,17</sup> In our case, surgical intervention was required to deal with the suppurative inflammation of vas which is quite unusual for two reason. For unusual presentation in inguinal part of excurrent ductal system as a primary representative site and tuberculosis of the same presenting with suppuration in this region which is not reported in the literature. Male genital tuberculosis usually is associated with renal tuberculosis in 60% to 65% of cases or with pulmonary tuberculosis in approximately 34% of cases.<sup>8</sup> No renal or pulmonary involvement was seen in our patient considering the lack of symptoms and negative findings on the chest radiograph and ultrasonography of the abdomen. Our patient is a case of isolated tuberculosis of efferent ductal system with no other tuberculous foci elsewhere in the body.<sup>18</sup>

## CASE REPORT



**Fig. 1: Granuloma in vas deferens**

**Fig. 2: Caseating necrosis**

**CONCLUSION:** If the patient presents with clinical history of long duration along with mild clinical symptoms and the imaging is suggestive of inflammatory pathology with abscess formation in the genital organs and failure to respond to conventional antibiotic treatment, possibility of tuberculosis is to be kept in mind especially in the endemic areas and patient should be investigated for the same. The case has been reported for its rarity and atypical presentation where the suppurative tuberculous vasitis presenting as a groin mass.

### REFERENCES:

1. Kapoor R, Ansari MS, Mandhani A, Gulia A (2008) Clinical presentation and diagnostic approach in cases of genito urinary tuberculosis. *Indian J Urol* 24: 401-405.
2. Kim SH. Urogenital tuberculosis. In: Pollack HM, McClennan BL, Dyer RB, Kenney PJ, ed *Clinical urography*; 2nd ed; Philadelphia, PA Saunders, 2000: 1193-1228.]
3. Shah H, Shah K, Dixit R, Shah KV (2004) Isolated Tuberculous epididymo-orchitis. *Indian J Tubercul* 51: 159-162.
4. Lenk S, Schroeder J. Genitourinary tuberculosis. *Curr Opin Urol*.2001; 1: 93-8.
5. Wise GJ, Shteynshlyuger A. An update on lower urinary tract tuberculosis. *Curr Urol Rep*.2008; 9: 305-13.
6. Chan PTK, Schlegel PN. Inflammatory conditions of the male excurrent ductal system. Part I and II. *J Androl* 2002; 23: 453-69.
7. SP Ryan, PJ Harte Suppurative inflammation of vas deferens: an unusual groin mass. *Urology* 31, 245-246(1988).
8. Figueiredo AA, Lucon AM, Gomes CM, Srougi M (2008) Urogenital Tuberculosis: Patient classification in seven different groups according to clinical and radiological presentation. *International Braz J Urol* 34: 422-432.
9. Bissada NK, Redman JF, Finkbeiner AE. Unusual inguinal mass secondary to vasitis. *J Urology* 8:5 1976; 488-9. PMID 982738
10. Maitra AK. Odd inguinal swelling. *Lancet* 1970; 1: 45.
11. Wolbarst AL. Vas deferens, generally unrecognized clinical entity in urogenital disease. *J Urol* 1933; 29: 405.
12. *Can Urol Assoc J* 2011; 5(4): e74-e76; DOI: 10.5489/cuaj.10116.

## CASE REPORT

13. Eddy K, Connell D, Goodacre B, et al. Imaging findings prevent unnecessary surgery in vasitis: an under-reported condition mimicking inguinal hernia. *Clin Radiol* 2011; 66: 475-7). In our case, patient was initially treated with antibiotics.
14. Trojian TH, Lishnak TS, Heiman D. Epididymitis and orchitis: an overview. *Am Fam Physician* 2009; 79: 583-7.
15. Das P, Ahuja A, Datta Gupta S (2008) Incidence, etiopathogenesis and pathological aspects of genitourinary tuberculosis in India: A journey revisited. *Indian J Urol* 24: 356-361.
16. Malai Muttarak, MD and Wilfred C. G. Peh. Case 9: Tuberculous Epididymo-orchitis. *Radiol* 2006; 238: 748-751.
17. Madeb R, Marshall J, Nativ O, Erturk E. Epididymal tuberculosis: case report and review of the literature. *Urology* 2005; 65(4): 798.
18. Shah H, Shah K, Dixit R, Shah KV (2004) Isolated Tuberculous epididymo-orchitis. *Indian J Tubercul* 51: 159-162.

### AUTHORS:

1. Kavimozhy Ilakkiya
2. Venu Gopal
3. Naresh Kumar
4. Aravind
5. Marudhavanan

### PARTICULARS OF CONTRIBUTORS:

1. Assistant Professor, Department of General Surgery, Sri Manakula Vinayagar Medical College & Hospital.
2. Associate Professor, Department of General Surgery, Sri Manakula Vinayagar Medical College & Hospital.
3. Assistant Professor, Department of General Surgery, Sri Manakula Vinayagar Medical College & Hospital.

### FINANCIAL OR OTHER

**COMPETING INTERESTS:** None

4. Professor, Department of General Surgery, Sri Manakula Vinayagar Medical College & Hospital.
5. Professor, Department of General Surgery, Sri Manakula Vinayagar Medical College & Hospital.

### NAME ADDRESS EMAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Kavimozhy Ilakkiya,  
No. 7, Sithananda Nagar,  
First Street, Karuvadikkuppam,  
Lawspet Post, Puducherry-605008.  
E-mail: kavimozhy86@gmail.com

Date of Submission: 12/06/2015.  
Date of Peer Review: 13/06/2015.  
Date of Acceptance: 29/06/2015.  
Date of Publishing: 06/07/2015.