



## Tubercular Recto-Prostatic Fistula: A Rare Entity

Authors

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### ABSTRACT

*Recto-prostatic fistulas are rare entities in any urology outdoor. Most of the cases reported are by paediatric surgeons dealing with ano-rectal malformations or by surgeons involved in misfortunes of radical prostatectomies. There is scanty data on the inflammatory causes of recto-prostatic fistulas. Despite the prevalence of uro-genital tuberculosis in the developing world, very little literature is available on tuberculosis forming a cause of recto-prostaticurethral fistula. Prostatic biopsy clinches the diagnosis and urethroscopy may actually demonstrate the fistulous opening in the prostatic urethra. Recent studies advocate a conservative approach (ATT Regimen) with/without urinary/faecal diversion. We report a similar such case which was treated with Anti-tubercular therapy without faecal/urinary diversion. The lesion healed with minimal scarring and the patient was able to void urine normally after 6 months of Anti tubercular therapy. Based on the review of literature and our own case we propose that high grade of clinical suspicion should be kept on the tubercular cause of recto-prostatic fistulas in endemic areas and that conservative management should be the first line of treatment.*

### CASE REPORT

A 56 year old male presented to emergency deptt. with acute retention of urine. Per-urethral catheterization was done and about 1litre urine was drained. He was found to have grade-2 prostatomegaly on per-rectal examination. Ultrasound was consistent with the per-rectal findings. Patient was advised trans-urethral resection but refused for surgery and was discharged with catheter in situ.

The patient got the catheter removed 1 month later. Upon presentation in the urology OPD, patient was voiding urine per-rectally. Past history revealed that the patient was a diagnosed case of pulmonary tuberculosis for which he had taken incomplete treatment. X-Ray chest revealed changes consistent with pulmonary tuberculosis.

There was no other significant history and general examination was unremarkable.

Per-rectal examination was suggestive of a fistulous opening in the left lobe of prostate. Ultrasonography revealed prostatomegaly with multiple echogenic foci in the bladder. A MRI Scan was suggestive of findings of carcinoma prostate with vesico-rectal/urethro-rectal fistula. RGU Showed extravasation of the dye into the rectum. A CECT-KUB delineated the fistulous tract from rectum to prostatic urethra. Urethroscoposcopic examination revealed a fistulous opening just distal to veru tracking to the rectum. Biopsy was taken from the lateral prostatic lobes and sent for histopathological examination.

Histopathological report was suggestive of *tubercular prostatitis*. PCR for tuberculosis was positive in the biopsy specimen. Based on the above findings, diagnosis of tubercular recto-prostatic fistula was made. The patient was catheterized per-urethrally and Anti tubercular therapy was started. Catheter was changed every month and anti-tubercular drugs were continued. Catheter was removed after 6 months and the patient was able to void urine normally. A MCU showed a healed up fistulous tract with no evidence of dye leakage to the rectum.

### REVIEW OF LITERATURE

Tubercular involvement of the prostate gland is known to present as granulomatous prostatitis. The exact incidence is unknown at present, but is reportedly low. In India, a survey of 126 patients who underwent fine needle aspiration cytology for suspicion of malignancy revealed tuberculosis in 3%.<sup>1</sup>

Urogenital tuberculosis is the result of a secondary hematogenous dissemination in the kidney Mycobacterium tuberculosis from a usually respiratory primary focus then broadcast through canal. The progression of pulmonary tuberculosis and the increasing number of immunocompromised patients suggests an upsurge locations in the years to come. Prostate localization is rare and its incidence remains unclear<sup>2</sup>

During the first half of this century, prostatic abscess was frequently caused by Neisseria gonorrhoeae, due to sexually transmitted disease and mainly in young patients. In the second half of this century, the incidence of prostatitis, and hence prostate abscess, has sharply diminished since the introduction of antibiotics.<sup>3</sup>

Despite the prevalence of urogenital tuberculosis in the non-industrialised world, rectoprostatic fistula caused by tuberculosis is extremely rare. A possible explanation for this rarity is that the fascia between the prostate and rectum acts as a barrier.<sup>4</sup>

Rectoprostatic fistula is a rare complication of any form of prostatectomy, including transurethral

resection.<sup>5,6</sup> Weinberger et al reported that 44 (17%) of 260 patients with prostatic abscess had spontaneous rupture into adjacent organs<sup>3</sup>

Although signs and symptoms are not specific for prostatic abscess, pelvic CT and transrectal ultrasound are very useful methods for making a precise diagnosis. Typical findings on CT are multiple, well demarcated fluid collections within the prostate gland and periprostatic tissues.<sup>7</sup>

The correct diagnosis may be delayed if the fistula is too small to detect by endoscopy.

Patients then present with recurrent urinary tract infections and fecaluria.<sup>6</sup>

The prognosis of rectal fistulas prostatico-Original TB remains good under antitubercular treatment associated with temporary urinary diversion. The use reconstructive surgery is possible in case failure.<sup>8</sup>

With regard to treatment, different methods have been employed in cases reported in the literature. Three cases in which *M. tuberculosis* was found in urine or pus had spontaneous closure of fistula after antitubercular chemotherapy.<sup>9-11</sup> Another case underwent a successful pull-through operation.<sup>13</sup> One case<sup>11</sup> received no treatment whereas another<sup>12</sup> required a combined abdomen-operineal approach with omental interposition and no faecal or urinary diversion.

### CONCLUSION

Spontaneous tubercular rectoprostatic fistulae are a rare complication of prostatic tuberculosis. There is no renal, ureteric or bladder involvement. The fistulae open adjacent to the verumontanum in the prostatic urethra. Urine for acidfast bacilli may be negative and prostatic biopsy proves the diagnosis. Conservative management with antitubercular drugs and urinary diversion with or without faecal diversion has a high success rate and should be the first line of treatment.

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