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Case Report
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Septic Prostatic Abscess Mimicking Acute Prostatitis: Successful Endoscopic Management

*Ahmed H**

Department of Urology, St. Anna University Hospital, Varna, Bulgaria

Abstract

Prostatic abscess is an uncommon but potentially life-threatening urological condition that may closely mimic acute prostatitis, resulting in delayed diagnosis and treatment. Early recognition is essential, particularly in patients with persistent sepsis despite appropriate antimicrobial therapy. We present the case of a 69-year-old male admitted with fever, dysuria, constipation and perineal pain who was initially diagnosed with acute bacterial prostatitis. Despite broad-spectrum per oral antibiotics, the patient remained febrile with worsening inflammatory markers. CT scan revealed a multiloculated prostatic abscess measuring 3 cm × 3 cm. The patient underwent transurethral resection and deroofing of the abscess cavity with successful drainage of purulent material. Microbiological culture identified Escherichia coli. Postoperatively, the patient demonstrated rapid clinical improvement with normalization of inflammatory markers and complete symptom resolution. This case highlights the importance of considering prostatic abscess in patients with refractory acute prostatitis and supports transurethral drainage as an effective treatment modality for large multiloculated abscesses.

Keywords: Prostatic abscess; Acute prostatitis; Transurethral resection; Sepsis; Endoscopic drainage

Introduction

Prostatic abscess is a rare urological entity in the modern antibiotic era, accounting for a small proportion of prostatic infections. However, delayed diagnosis may result in severe complications including sepsis, fistula formation, and death. Clinical presentation frequently overlaps with acute bacterial prostatitis, making differentiation difficult during initial evaluation [1].

Common risk factors include diabetes mellitus, immunosuppression, chronic catheterization, bladder outlet obstruction, and recurrent urinary tract infections. Patients typically present with fever, dysuria, perineal pain, urinary retention, and elevated inflammatory markers. Persistent symptoms despite appropriate antibiotic therapy should raise suspicion for abscess formation [1].

Imaging modalities such as Transrectal Ultrasonography (TRUS) and Computed Tomography (CT) are essential for diagnosis. Management options include conservative antibiotic treatment, TRUS-guided aspiration, transperineal drainage, and transurethral resection or deroofing of the abscess cavity. The optimal management strategy remains controversial and is often individualized according to abscess size, location, and clinical severity.

We present a case of septic multiloculated prostatic abscess initially misdiagnosed as acute bacterial prostatitis and successfully treated with transurethral resection [1,2].

Case Presentation

A 69-year-old male with a medical history of essential hypertonia, chronic obstructive pulmonary disease, status post myocardial infarction on per oral antiagregant therapy and right sided pielolitotomia in 1964 presented to the emergency department with a five-day history of fever, dysuria, urinary frequency, perineal pain, and progressive difficulty urinating. He additionally reported generalized weakness and chills.

On admission, the patient was febrile with a body temperature of 38.9°C. Physical examination demonstrated suprapubic tenderness and severe discomfort on digital rectal examination, with a markedly enlarged and tender prostate especially in the right lobe.

Laboratory investigations revealed leukocytosis with a white blood cell count of 43.3 × 10^9/L

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Correspondence:
Ahmed H, Department of Urology, St. Anna University Hospital, Varna, Bulgaria,
E-mail: hasanozkan97@gmail.com

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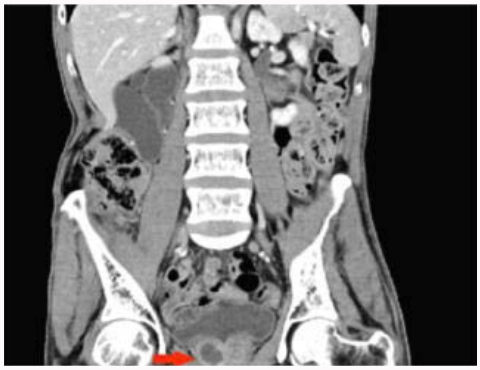

Figure 1: Contrast-enhanced pelvic computed tomography demonstrating a multiloculated hypodense collection within the right lobe of the prostate gland consistent with prostatic abscess (red arrow).

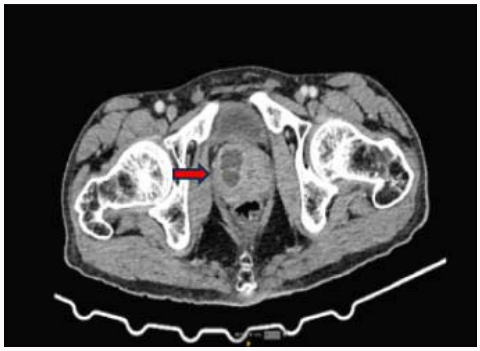

Figure 2: Transurethral resection of the roof of the abscess cavity and drainage.

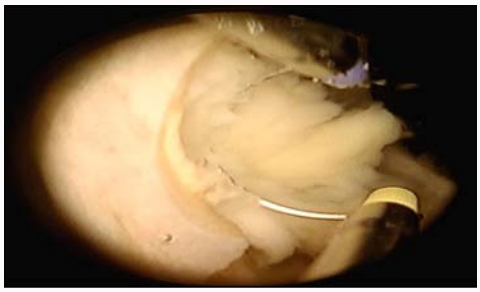

Figure 3: Contrast-enhanced pelvic computed tomography demonstrating a multiloculated hypodense collection within the right lobe of the prostate gland consistent with prostatic abscess (red arrow).

(3,5-10,5 × 109) and elevated C-reactive protein of 248,5 mg/L (0-3mg/L). Urinalysis demonstrated pyuria and bacteriuria. Serum urea and creatinine was normal.

The patient was initially diagnosed with acute bacterial prostatitis and commenced on per oral antibiotic treatment. Despite 72 hours of treatment, he remained febrile with persistent inflammatory marker elevation and worsening pelvic pain which led us to admit him to the hospital for further tests. We include double intravenous antibiotics 1) wide board-spectrum antibiotic (Medaxone) and 2) Aminoglycoside antibiotic (Gentamicin).

Contrast-enhanced pelvic computed tomography demonstrated a 3 cm × 2,8 cm multiloculated hypodense collection within the right lobe of the prostate gland consistent with prostatic abscess (Figures 1 and 2).

Figure 4: Follow-up resolution after TURS shows complete resolution of the abscess cavity.

Figure 5: Follow-up resolution after TURS shows complete resolution of the abscess cavity.

Given the size and multiloculated nature of the abscess, the patient underwent cystoscopy and transurethral resection with deroofing of the abscess cavity under general anesthesia. During the procedure, large amounts of thick purulent material were drained from the prostatic cavity (Figure 3). A Foley catheter was left in situ postoperatively.

Microbiological culture of the drained pus isolated Escherichia coli. After the intervention we include also Metronidazole for 3 days. The patient demonstrated rapid clinical improvement following surgery, with resolution of fever within 24 hours and gradual normalization of inflammatory markers CRP 15 mg/L, leucocytes 9 × 109. The Foley catheter was removed on postoperative day five, and the patient voided spontaneously without residual urine. Follow-up CT performed four weeks later demonstrated complete resolution of the abscess cavity (Figures 4 and 5) [2].

Discussion

Prostatic abscess remains a diagnostic challenge because its presentation closely resembles acute bacterial prostatitis. Both conditions commonly present with fever, lower urinary tract symptoms, perineal pain, and urinary retention. Consequently, diagnosis is often delayed until patients fail to improve with appropriate antimicrobial therapy.

Diabetes mellitus is considered one of the most important predisposing factors due to impaired immune function and increased susceptibility to severe urinary tract infections. In the present case,

previously done pyelolitotomia and chronic pyelonephritis likely contributed to abscess formation and septic presentation.

Persistent fever despite broad-spectrum antibiotics should prompt early imaging evaluation. TURS is traditionally considered the diagnostic modality of choice due to its ability to visualize abscess cavities and facilitate aspiration. However, CT imaging provides excellent anatomical detail and may better demonstrate multiloculated collections and extension beyond the prostate.

There is currently no universally accepted management algorithm for prostatic abscess. Small abscesses may occasionally respond to antibiotics alone, whereas larger lesions generally require drainage. TRUS-guided aspiration offers a minimally invasive approach but may be associated with incomplete drainage and recurrence, particularly in multiloculated abscesses.

Transurethral resection and deroofing provide direct visualization and effective drainage of extensive abscess cavities. Several studies have demonstrated favorable outcomes with endoscopic management, including shorter hospital stay and lower recurrence rates [3]. In our patient, transurethral drainage resulted in rapid clinical recovery and complete radiological resolution.

This case emphasizes the importance of maintaining a high index of suspicion for prostatic abscess in patients with presumed acute prostatitis who fail to improve despite appropriate therapy [4,5].

Conclusion

In conclusion, prostatic abscess represents a rare but potentially serious urological emergency that should be strongly suspected in patients presenting with persistent or refractory acute prostatitis, especially when accompanied by ongoing fever, sepsis, urinary retention, or inadequate clinical response despite appropriate broad-spectrum antibiotic therapy. Delayed recognition may lead to significant morbidity, systemic deterioration, and life-threatening complications, underscoring the importance of maintaining a high index of clinical suspicion in high-risk patients.

Early and accurate radiologic assessment, particularly with contrast-enhanced computed tomography or transrectal ultrasonography, plays a pivotal role in establishing the diagnosis, determining the extent of disease, and guiding therapeutic decision-making. While conservative antibiotic treatment may be appropriate in selected small abscesses, larger, multiloculated, or clinically significant collections frequently require prompt surgical intervention to achieve adequate source control.

Our case further highlights that transurethral resection and drainage constitute a safe, minimally invasive, and highly effective therapeutic strategy for complex prostatic abscesses, allowing complete drainage, rapid resolution of sepsis, significant symptomatic improvement, and excellent overall clinical outcomes. In addition to providing definitive treatment, this approach may shorten hospitalization, reduce recurrence risk, and prevent progression to severe infectious complications. Early diagnosis combined with timely endoscopic management remains essential for optimizing patient recovery and minimizing morbidity in this uncommon but clinically important condition.

References

1. Ackerman AL, Parameshwar PS, Anger JT. Diagnosis and treatment of patients with prostatic abscess in the post-antibiotic era. Int J Urol. 2018;25(2):103-10.
2. Collado A, Palou J, García-Penit J, Salvador J, de la Torre P, Vicente J. Ultrasound-guided needle aspiration in prostatic abscess. Urology. 1999;53(3):548-52.
3. Jang K, Lee DH, Lee SH, Chung BH. Treatment of prostatic abscess: case collection and comparison of treatment methods. Korean J Urol. 2012;53(12):860-4.
4. Ludwig M, Schroeder-Printzen I, Schiefer HG, Weidner W. Diagnosis and therapeutic management of 18 patients with prostatic abscess. Urology. 1999;53(2):340-5.
5. Ravichandran K, Munien K, Sivabalan P, Wang YG, Desai D. Prostatic abscesses: clinical insights, diagnosis and management. Trends Urology & Men Health. 2024;15(1): 6-10.