

Percutaneous Drainage for Treatment of Prostate Abscess

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INTRODUCTION

Prostate abscess is a rare infection and can be treated by antibiotic administration and drainage.⁽¹⁾ The reported mortality rate of the prostate abscess is between 3% and 16%.^(1,2) In patients refractory to medical treatment, surgical interventions are advocated. We report a patient with the prostate abscess who was treated with percutaneous drainage.

CASE REPORT

A 67-year-old man with obstructive urinary symptoms and prostate-specific antigen level of 8.9 ng/mL underwent transperineal prostate biopsy. Three days later, the patient addressed herself to the emergency ward with fever, chills, and poor general condition. On physical examination, his blood pressure, pulse rate, and temperature were 130/80 mmHg, 105 per minute, and 39°C, respectively. In rectal examination, the patient had a huge enlarged prostate with a prominent left lobe.

Urine and blood cultures, prior to starting the

antibiotic therapy, both exhibited *Escherichia coli*. Transabdominal ultrasonography of the prostate showed a hypoechoic mass with abundant debris in the left prostatic lobe. Computed tomography (CT) scan revealed a 5 × 8-cm homogenous mass with a low density on the same region of the prostate (Figure 1).

The patient received vancomycin, metronidazole, and ceftazidime intravenously. Thereafter, he underwent percutaneous drainage because of unresponsiveness to medical therapy. Prostate abscess was drained transperineally using transrectal ultrasonography (TRUS) guidance (Figure 2) and

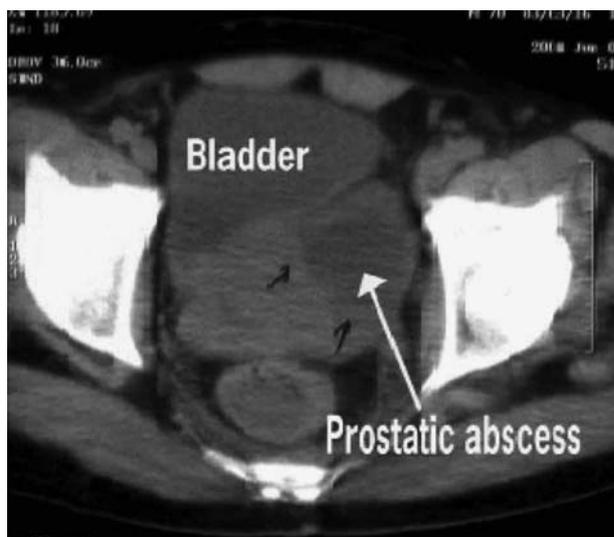


Figure 1. Computed tomography scan shows a homogenous mass with low density in the left prostatic lobe.

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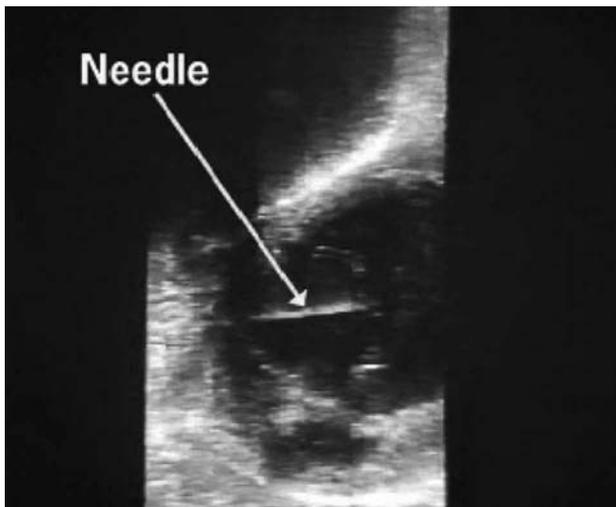


Figure 2. Transrectal ultrasonography, Arrow demonstrates the needle.

a suprapubic cystostomy was created. A Pigtail catheter was inserted into the abscess and irrigation was done twice a day using saline and antibiotics. On the 5th day, after discontinuing pus discharge, the Pigtail catheter and the cystostomy were removed.

One month thereafter, the symptoms were resolved and the abscess diminished in size in the CT scan (Figure 3). But the patient referred to our clinic again with obstructive symptoms and medical treatment was started de novo. Due to failed medical treatments, open prostatectomy was performed 5 months later. The patient is completely symptom-free now.

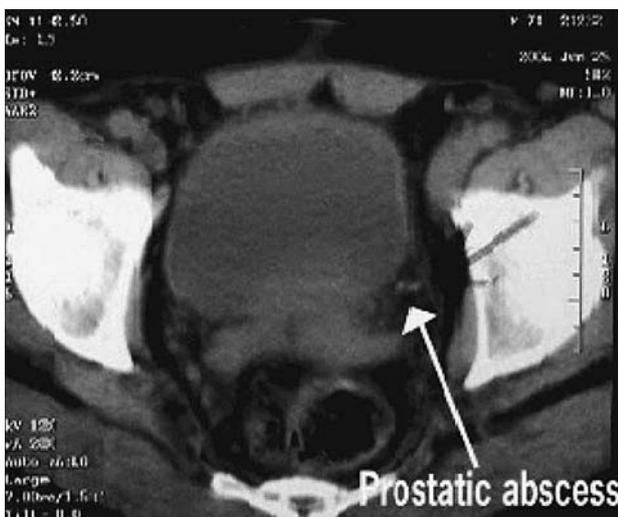


Figure 3. Arrow demonstrates Pigtail catheter inserted into the prostate.

DISCUSSION

The prostate abscess is an uncommon disease with the incidence rate of 0.5%.⁽³⁾ The most common symptoms of the disease are dysuria, frequency, perineal pain, fever, chills, and low back pain.^(4,5) It mostly occurs in the 5th and 6th decades of life and the most common organism is *Staphylococcus aureus*.^(1-2,6)

Transrectal ultrasonography is the most common diagnostic method of the prostate abscess and is a good guide for aspiration, percutaneous drainage, and assessment of the response to the treatment.^(1,7-9) In a study on 9 patients with the prostate abscess who had undergone perineal drainage and catheter insertion to remove the discharge without irrigation, two patients experienced the recurrence of the abscess in 1-month follow-up and underwent antibiotic therapy and drainage again.⁽²⁾ In another study, 6 patients with the prostate abscess underwent perineal aspiration using TRUS, and one patient experienced recurrence of the abscess, who underwent transurethral resection of the prostate.⁽⁷⁾

In our patient, drainage was performed transperineally under local anesthesia with the guide of TRUS using a stent for 5 days and washing with normal saline and antibiotics. In the 3-year follow-up with CT and TRUS, no recurrence was observed. Therefore, this method can be proposed as a less invasive and less morbid method for the treatment of the prostate abscess. However, further studies are required in this regard.

CONFLICT OF INTEREST

None declared.

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