MAR Gynecology & Urology (2025) 8:3

Case Report

A Rare Case of Pectineus Muscle Abscess after Transurethral Resection of the Prostate

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Received: 03 April 2025

Published: 26 April 2025

DOI: https://doi.org/10.5281/zenodo.15274542

Abstract

The isolated pectineal abscess is a very rare urologic pathology and has never been published to date. We present a 74-year-old Caucasian man, who recently undergoes an transurethral resection of the prostate in November 2022. A CT examination showed a perforation of the prostatic capsule and a fluid collection in the pectineus muscle. As treatment, a Foley catheter was implied and the patient healed up without complication.

Although adductor muscle abscesses are not expected as a complication after TUR-P, it should be considered in patients presenting with pain on adduction.

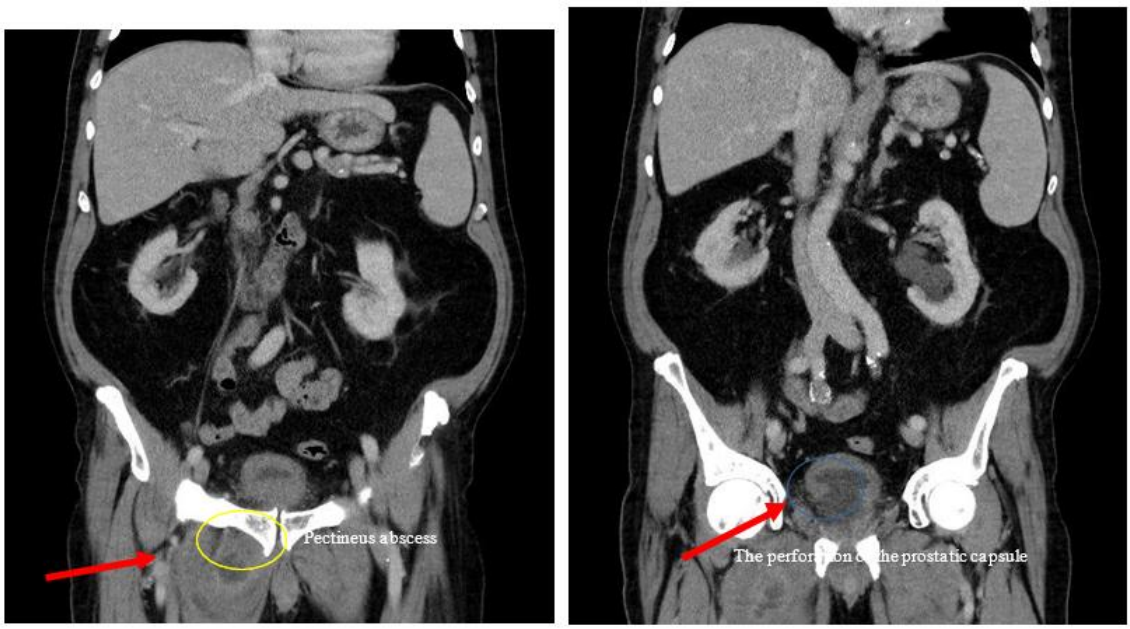
Introduction

In fact, pectineus muscle abscesses are very unusual anomalies. Up to the present there are no case reports in the literature.

In the literature review, it has been shown that the most common complications after transurethral resection of the prostate are bleeding, clot retention and urinary tract infections.(1) Owing to the lack of literature, in this study a case of pectineus muscle abscess after transurethral resection of the prostate(TUR-P) is presented. As far as known, this is the first case report and that attends to a rare clinical situation in urologic surgery.

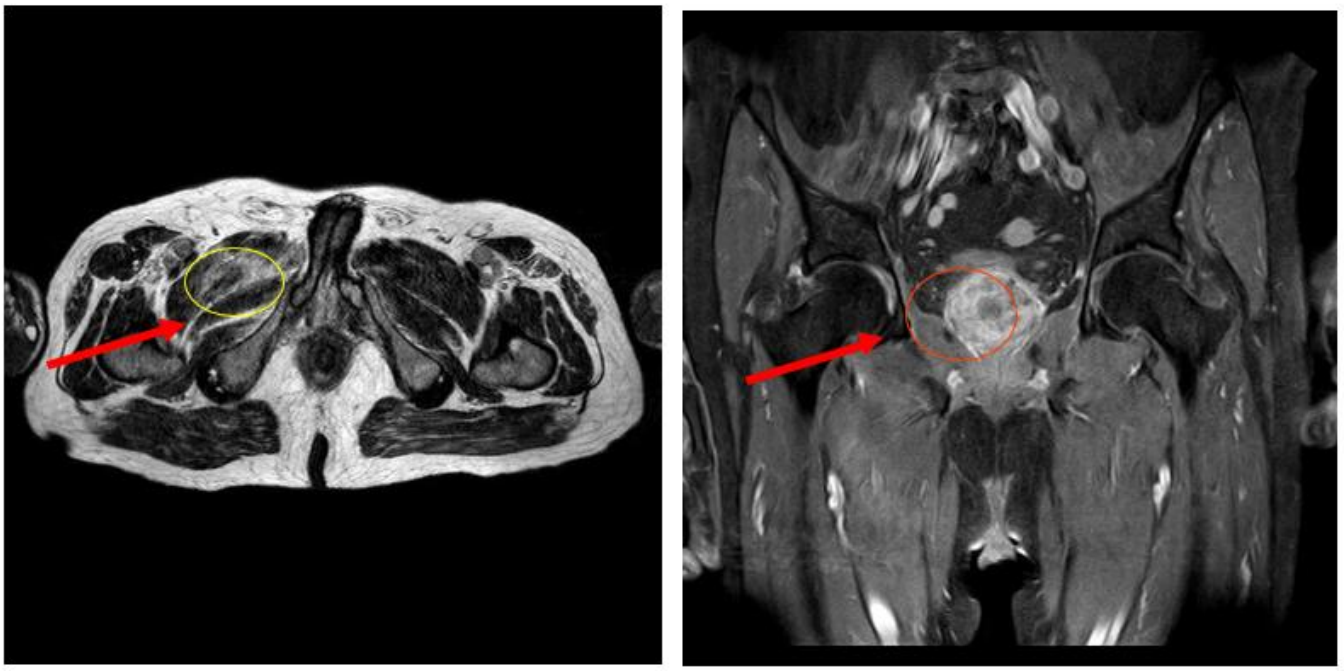
Case Presentation

A 74-year-old Caucasian man came to the emergency department with pain in adduction on the inner side of the right thigh and on the fever of 38,2° C. In its medical history has shown that ventricular extrasystole, high-grade aortic valve stenosis and transurethral prostate resection 2 weeks ago. He had neither immunosuppressive disease nor medication. He does not smoke, nor did his family history contribute. On physical examination, he had no symptoms except pain on palpation and adduction in the upper right inner thigh. Laboratory has demonstrated that a high leukocyte count of 13.41 x 109/l. The patient's C-reactive protein was elevated at 95.87 mg/l, the culture of the urine was sterile. A computer tomography was performed, which revealed that an inflammation of the pectineus muscle adjacent to approximately 2,5 cm abscess (Figure 1). This abscess area was also found to be associated with the prostatic capsule (Figure 2).



(a) (b)

FIGURE 1: Abdominopelvic CT scan revealed that a 2,5 cm pectineus abscess area [(a) yellow circle] and a perforation of the prostatic capsule [(b) blue circle].



(a) (b)

FIGURE 2: In the T1 and T2 sequences of MR imaging, it was found that the abscess area [(a) yellow

circle] decreased significantly and there was no perforation of the prostate capsule [(b) red circle].

As a result of a diagnosis of septicemia secondary to a pectineus abscess, a 18-French 2-way Foley catheter was inserted as a drainage and the patient underwent intravenous ampicillin sulbactam treatment for 4 days. Following treatment, the infection parameters declined to acceptable levels and the patient was hemodynamically stable. The patient was discharged with an additional 2 weeks of oral antibiotic therapy.

Four weeks after the treatment the MRI demonstrated that prostatic capsule was intact and there was a significant reduction in the abscess area. He also denied any pain or symptoms.

Discussion

The most common complications following TUR-P are intraoperative and post-operative hemorrhages with clot retention, prolonged urinary retention and urinary tract infections (1).

The pectineus muscle, one of the adductor muscles of the thigh, begins between the ilium and pubis bones and ends in the tuberculum pubicum (2). Although an isolated pectineal abscess has not been observed in the literature up to date, adductor abscesses have been rarely published along with pectineus muscle in the region. In the international Urogynecology, one case was reported(3). The patient was 65 year-old-female, who described with pain involved with dermal inflammation signs of the right thigh. This patient had been operated with sub-urethral sling surgery for stress urinary incontinence.

Contrary to the previous patient, our patient was experiencing adduction pain. Female and male urogenital system distinctions and different surgical methods may account for this difference.

In another case, a bilateral abscess of the adductor muscle was reported with chronic osteomyelitis of the pubic symphysis 10 years after TUR-P (4). Two years before the operation, this patient was treated brachytherapy for prostate cancer. In contrast to that patient, our patient was in an acute state.

Although contrast-enhanced tomography is used in the diagnosis, MRI is the imaging method in deep abscesses (5). Since the size of the abscess in our case was small, it is preferred to stay conservative in the treatment.

Conclusion

According to the available data, the pathophysiological mechanism of the pectineus abscess is not clear. Based on evidence from other abscesses, the treatment of Pectineus abscesses may be appropriate through incision, drainage and antibiotics.

Although they are very rare, adductor muscle group abscesses should be considered in patients presenting with pain in adduction after any pelvic surgery.

Consent

No written consent has been obtained from the patients as there is no patient identifiable data included in this case report.

Conflicts of Interest

The authors declare that they have no conflicts of interests.

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