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A Case of Perianal Abscess Due to Prostatic Abscess

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Authors' contributions

This work was carried out in collaboration between all authors. Authors MS and UU wrote the first draft of the manuscript. Authors EK, OI and EK managed the literature searches. All authors read and approved the final manuscript.

Case Study

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ABSTRACT

Abscess, is a condition that often occurs in the anorectal region. Anorectal abscesses are more frequently seen in men than women (2:1 or 3:1) and often seen in 3th-5th decades. Prostatic abscess, which is a rare condition today, has been thought that originated from prostatitis. A 50 year old male patient, was admitted to our urology clinic with the complaints of urinary frequency and dysuria for last two months. There is no prominent feature other than diabetes in the patient's history and asymmetric growth found on the left lobe in rectal examination of the prostate. The patients presenting with clinically anorectal abscess should be assessed properly with history, physical examination, laboratory, and imaging findings and also rarely underlying causes of inflammation of adjacent organs such as the prostate abscess should be kept in mind.

Keywords: Anorectal abscess; prostatic abscess; diabetes mellitus.

1. INTRODUCTION

Abscess, is a condition that often occurs in the anorectal region. Anorectal abscesses are more frequently seen in men than women (2:1 or 3:1) and often seen in 3th-5th decades.

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Infection of anal canal crypts is the most common cause of spontaneous perianal abscess. Foreign bodies, malignancy, trauma, tuberculosis, leukemia, postoperative infection, inflammatory bowel disease and simple skin infections are the risk factors for abscess formation [1]. However prostatic abscess fistulizing to the rectum and perineum have been reported and moreover it has been reported that, prostatic abscess, might cause perianal abscess very rarely [2,3]. We couldn't find any case in literature that anorectal abscess secondary to the prostatic abscess. We report an anorectal abscess case secondary to prostatic abscess.

2. CASE PRESENTATION

A 50 year old male was admitted to our urology clinic with the complaints of urinary frequency and dysuria for last two months. There is no prominent feature other than diabetes in the patient's medical history and asymmetric growth found on the left lobe in rectal examination of the prostate. There was leukocytosis in hemogram (WBC:16,5x10^9/lt). A pelvic computed tomography (CT) revealed 53x58x92 mm sized hypodense cystic mass and mild peripheral staining on the left half of the prostate (Fig. 1). It has been reported as suspicious abscess or necrotic cystic mass. Antibiotics (Levofloxacin 500mg tablets) have ordered after the isolation of staphylococcus aureus in urine culture. After 8 days, the patient was admitted to general surgery clinic with complaints of rectal pain and high fever. Physical examination revealed ulcerated perianal abscess in 9 o'clock position of the knee-elbow position. We diagnosed perianal abscess secondary to prostatic abscess. On pelvic CT, there was an abscess formation which has been originated from prostate and extended to perineum, filled the intersphincteric plane in 12-8 o'clock position, past the perineum and progressed toward the left levator ani muscle in 4-6 o'clock, past left levator ani muscle through the 1-5 o'clock and extended into ischiorectal fat plane and became complicated (Fig. 2). Abscess drainage procedure was done under general anesthesia in the prone position with an incision at 9 o'clock level. After the evacuation of abundant pus, it has been revealed in examination that abscess has surrounded the perianal region and reached the prostate. All the septations have been opened and abscess cavity has been flushed with plenty of hydrogen peroxide and physiological saline solutions. Operation has been ended after the administration of drain tube into the abscess cavity. The drain has been removed and the patient has been discharged without any complication on 5th postoperative day (Fig. 3). We ordered ampicillin- sulbactam 1gr and clindamycin 600mg twice daily after perianal abscess drainage.

3. DISCUSSION

Prostatic abscess is a rare condition today. It is thought that most of the prostate abscess have been originated from protatitis. It is usually formed by reflux of infected urine by enterobacteria and the most frequently isolated bacteria is *E. coli* [4]. The second most common agent is *S. aureus* that spreads hematogenously from a distant site of the body [5]. *S. aureus* was the cause of disease in our patient, too. Symptoms usually are not specific and it makes difficult to diagnose. Prostatic abscess usually present with lower urinary tract symptoms and pain. Rectal, perineal and urethral fistulas can be seen in prostatic abscess. It is very rare clinical condition to come up with anorectal abscess as our case.

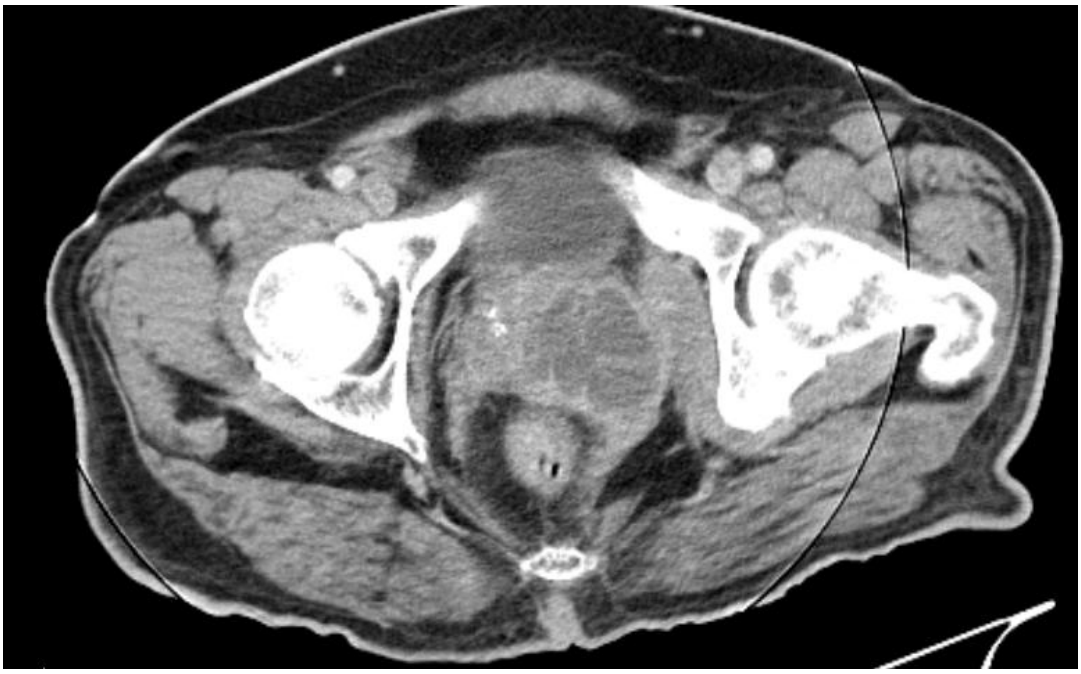

Fig. 1. CT image of prostatic abscess

Fig. 2. CT image of perianal abscess based from prostatic abscess

Fig. 3. Image of perianal abscess after surgical management

Anorectal abscess are classified as perianal, intersphincteric, ischiorectal, ischioanal, supralevator and horseshoe abscess for their origins [6]. The incidence rates vary in many series but is most commonly seen as perianal abscess (50%). Our case is not proper with above classification. According to the radiological findings, it is a complicated, atypical anorectal abscess that extends to the supralevator, intersphincteric, ischiorectal and perianal area. We know that the patient has taken antibiotic treatment with initial diagnosis of prostatic abscess, considering his clinic and CT scan results. There was no anorectal abscess formation in first pelvic CT. We believe that our case was an atypical supralevator abscess that the infection has spread out from supralevator plane to the anorectal region and formed perianal abscess. Supralevator abscesses are relatively rare among anorectal abscesses and it is hard to diagnose them. There is rarely an external examination finding suggestive of this disease so the diagnosis and treatment can be delayed for 2-3 weeks. Therefore, appropriate and aggressive treatment is necessary to reduce mortality and morbidity. It is rarely indicated to use of antibiotics alone in the treatment of anorectal suppuration. Regional cellulites can be reduced with antibiotics alone therapy but actual treatment is abscess drainage with antibiotherapy [7]. In this case, antibiotherapy has begun in urology outpatient clinic with an initial diagnosis of prostatic abscess. The patient was admitted to general surgery clinic with the absence of clinical decline and even clinical progression. The patient has been hospitalized and treated with surgical drainage and antibiotics.

CT and magnetic resonance imaging are useful in diagnosis of perianal abscess that not detected in physical examination. We explored our patient with CT, due to a comparison of previous CT images performed for prostatic abscess.

It is hard to distinguish the certain source of supralevator abscess. Usually, it is secondary to the upward extension of ischioanal and intersphincteric abscesses or inflammation due to appendicitis, perforated diverticulitis, pelvic diseases such as Crohn's disease. In very rare cases, the infection may be secondary to adjacent organs such as the prostate and supralevator infections rarely complicated to create atypical clinical anorectal abscess as in our case.

4. CONCLUSION

In conclusion, the patients presenting with clinically anorectal abscess should be assessed properly with history, physical examination, laboratory, and imaging and also rarely underlying causes of inflammation of adjacent organs such as the prostatic abscess should be kept in mind.

CONSENT

All authors declare that 'verbal informed consent was obtained from the patient for publication of this case report and accompanying images.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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