

MANAGEMENT OF PROSTATIC ABSCESS: ABOUT ONE CASE AND LITERATURE REVIEW

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ABSTRACT

The prostatic abscess is a rare disease whose diagnosis has benefited from advances in imaging. Its treatment of choice remains trans-urethral endoscopic drainage. We report the case of a prostatic abscess in a 65-year-old patient who had had an obstructive syndrome of the lower urinary tract with dyschesis for 2 years. Ultrasound made the diagnosis by showing the presence of a prostatic abscess collection. The patient was placed under an antibiotic treatment, with transurethral drainage of the abscess. The evolution has been favorable.

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INTRODUCTION

Prostatic abscess is a rare condition that most often complicates acute prostatitis [1]. Since the wide use of antibiotics, its symptomatology has taken on less and less typical forms [1, 2, 3]. Its diagnosis is currently facilitated by medical imaging [1, 4, 5, 6].

MATERIALS AND METHODS

It is a 65-year-old patient with a history of type 2 diabetes with oral anti-diabetic drugs and a cataract of the right eye operated 8 months ago. This patient presents for 2 years an obstructive syndrome of the lower urinary tract with a dyschesis. The rectal examination showed a prostate enlarged, firm, and renal. The prostate-specific antigen was greater than 100 ng / ml. Renal vesico prostatic ultrasound showed a prostate gland of 253 g, a post-voiding residue at 206 cc with no repercussions on the upper urinary tract, and also demonstrated the presence of a prostatic abscess collection measuring 80 mm × 63 mm (Figure 1).



Figure 1 Vesico prostatic ultrasound showing a prostatic abscess collection measuring 80mm × 63mm.

The cytobacteriological examination of the urine was negative. The patient was placed under an antibiotic treatment with the placement of a catheter above pubic to drain the urine, two days later our patient underwent an RTU of some prostate chips with a pus issue. The control ultrasound performed a week later showed a marked regression of the abscess (Figure 2).



Figure 2 Control ultrasound showing a marked regression of the abscess.

DISCUSSION

Prostatic abscess is a rare complication of urinary tract infection [1, 7]. Inflammation is caused by reflux of infected urine in the prostatic ducts or by hematogenous route [7]. It may also be secondary to a prostate biopsy [1]. The evolution towards abscedation is favored by: diabetes, immunosuppressive therapy, chronic hemodialysis and endoscopic maneuvers [1, 7, 5]. The advent of antibiotics and the increase in urological endoscopic maneuvers have resulted in a change in bacterial ecology in favor of enterobacteriaceae [1, 6]. Clinical signs are not specific and can be encountered in many other urological pathologies. Pollakiuria, dysuria, and fever are the most common signs.

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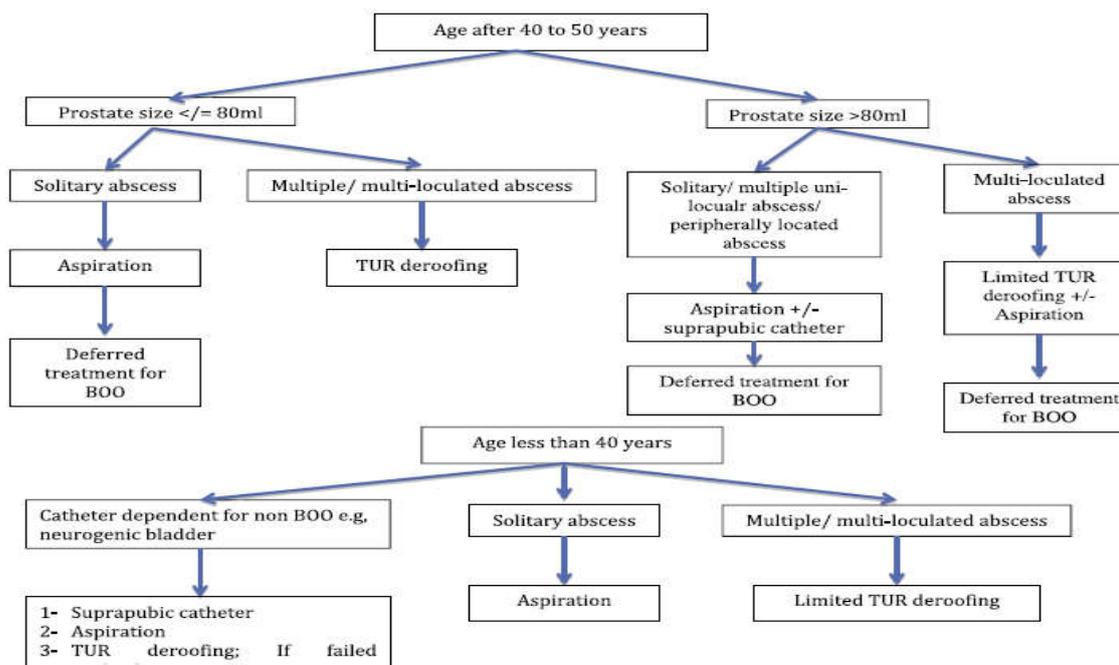


Figure 3 Prostate abscess treatment algorithm.

(BOO=bladder outlet obstruction. TUR=trans urethral resection)

Acute urine retention is possible as was the case in one of the patients in our series. The rectal examination is not specific either. It can evoke the diagnosis before a fluctuating mass, but it is only found in 16 to 20% of cases [6]. The prostate is sensitive in 35% of cases [8]. The progress of imaging has facilitated the diagnosis and treatment of the prostatic abscess [1, 4, 9, 5, 6]. Transrectal ultrasound occupies a prominent place, showing a hypo-echogenic zone at the beginning, which becomes frankly trans-sonic at the stage of collection and sometimes a posterior reinforcement [1, 10]. The computed tomography provides information that can be superimposed on ultrasound, showing a zone of attenuated density within the prostate gland [7]. The abscess can be single or multiple, precision to be sought carefully because it allows to guide the mode of drainage [5].

Differential diagnosis can be made with a prostatic cyst, dilation of the prostatic urethra upstream of a urethral stricture and an adenomectomy lodge [11]. The treatment of prostatic abscesses is based on antibiotic therapy and drainage. Urine diversion by suprapubic catheterization is indicated in case of urine retention or voiding discomfort.

Antibiotic therapy must take into account the prostatic barrier and the germ involved [1, 7]. Micro-abscesses (abscesses less than 1 cm in diameter) do not require a drainage gesture. They disappear in most cases after 4 to 6 weeks of antibiotic treatment with aminoglycoside-associated fluoroquinolones in the first 5 days [12, 13].

The drainage of the abscess can be done transurethral, transrectal and transperineal (surgical or percutaneous). The best technique is the one that is least at risk of sepsis and minimizes the risk of re-intervention. Rectotomy has very limited indications. In 1985, WEINBERGER proposed the transrectal route only in cases of abscesses ruptured in the perirectal space, the correct perineal drainage of which is, according to him, more random [14]. In 1999, rectotomy was virtually non-existent in current practice.

Needle aspiration by the trans-perineal route seems to be the least invasive, but it has limitations, especially in the drainage of a multi-sacral abscess [15]. Endoscopic transurethral resection offers the advantage of collapsing cubicles under visual control but is at risk of bacteremic discharge or severe sepsis [8]. The authors reported that transurethral resection to treat a prostatic abscess is risk-free only when the prostate is less than or equal to 80 ml [16]. In the series of LIM JW *et al* [17], transrectal ultrasound drainage resulted in 86% success, out of only 14 treated patients, two necessitated another therapeutic modality, namely perineal incision drainage in one Case and trans-urethral resection in the second case. ELSHAL AM *et al* [18] propose an algorithm for the management of prostatic abscess (Figure 3) based on the age of the patient, the size of the prostate and the associated urinary disorders.

The trans-vesical drainage of the prostatic abscess nevertheless offers the advantage of being able to carry out the ablation of an associated prostatic adenoma. But this must be done with caution to minimize the risk of septicemia. We recommend a pre-operative parenteral antibiotic combination of a third-generation cephalosporin and an aminoglycoside; It should be continued and adapted to the antibiogram as soon as possible for a total duration of three weeks. Irrespective of the type of drainage, the surgical procedure must always be framed by a parenteral antibiotic combination of cephalosporins and aminoglycosides [15].

CONCLUSION

Prostatic abscess is a rare disease whose clinical symptomatology is not always specific. Transrectal ultrasound and computed tomography (CT) occupies a prominent place in the diagnosis of this condition. Treatment is based on antibiotic therapy and drainage, the best method of which is transurethral resection.

Contributions of the Authors

Adil Kallat: clinical examination, explorations, transurethral resection of the prostate, case discussion and follow-up decision.

Ahmed Ibrahim: clinical examination, explorations, case discussion and follow-up decision.

Hani Abousaleh: clinical examination, explorations, case discussion and follow-up decision.

Hachem El Sayegh: case discussion and decision on follow-up.

Ali Iken: case discussion and follow-up decision.

Lounis Benslimane: case discussion and decision on follow-up.

Yassine Nouini: case discussion and decision on follow-up.

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