

**ISOLATED PROSTATIC TUBERCULOSIS: A RARE UROGENITAL LOCATION.  
ABOUT A CASE**

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**SUMMARY**

Isolated prostate tuberculosis is uncommon. Authors report herein the case of 62-year-old man who presented obstructive syndrome of low urinary tract, The prostatic finding and PSA were abnormal. The prostatic biopsy was negative. The diagnosis of prostatic tuberculosis was made by histologic analysis after transurethral resection of prostate. The treatment is based on chemotherapy anti-tuberculosis.

**KEYWORDS:** Tuberculosis, prostatic, Diagnosis, Treatment.**INTRODUCTION**

The incidence of tuberculosis is currently increasing growing. If urogenital tuberculosis (TUG) is frequent<sup>[1]</sup>, isolated prostatic involvement is rare, as evidenced by the scarcity of observations published in the literature. even in countries with a high endemic tuberculosis.<sup>[2]</sup> In the light of an observation collected in our service, we propose to discuss the epidemiological and diagnostic aspects.

**OBSERVATION**

Mr. A.S., 62 years old, of modest socioeconomic level, consulted for an obstructive syndrome of the lower urinary tract associating a dysuria and a pollakiuria evolving for four months, complicated by acute retention of urine derived by bladder catheterization. These symptoms were accompanied by anorexia, asthenia and unstated weight loss, with no personal or family history of tuberculosis. The rectal examination appreciated a prostate enlarged of volume, of hard nodular consistency. Biology found a high PSA level of 16 ng / ml. Prostate ultrasound: heterogeneous prostate, increased in volume estimated to 85g.

Transrectal prostate biopsy was indicated due to the strong suspicion of prostate cancer. Histology revealed granulomatous prostatitis with caseous necrosis. The cytobacteriological examination of the urine (ECBU) with search for BK for 3 consecutive days all came back infected with BK. A general workup for another associated tuberculosis site was negative.

A 6-month anti-bacillary treatment was started, with the introduction of an alpha-blocker such as alfuzosin. The

bladder catheter was removed on the fourth week, with a decrease in symptoms observed. After the 6th month of anti-bacillary treatment, the ECBU came back sterile.

**DISCUSSION**

Urogenital tuberculosis (UGT) is the first localization of all extrapulmonary sites of tuberculosis.<sup>[1]</sup> Prostate localization, especially if isolated, is rare.<sup>[2,3]</sup> Its first description dates from 1882 by Jasmin.<sup>[2]</sup> Its incidence is estimated at 6.6% of TUG.<sup>[2]</sup> Prostate involvement is often secondary to the upper urinary tract tuberculosis.<sup>[2,4]</sup> However, in some cases, this impairment is absent. Coulaud<sup>[5]</sup> provided precise experimental data on the evolutionary cycle of Koch's bacillus in the urogenital tract by varying the virulence and the amount of BK injected. He demonstrated that the hematogenous route is most likely. Other ways of spread of Koch's bacillus have also been cited without being demonstrated. These are the lymphatic pathway and the canal route. But it can also be primary or secondary to epididymal or bladder tuberculosis.<sup>[4]</sup> The risk of prostate contamination, during BCG therapy, was also mentioned by some authors.<sup>[2]</sup> From an anatomopathological point of view, the histological lesions have no particular character and are presented as form of typical tuberculous follicles clustered in granulation or a nodule of which the elementary lesion is represented by epithelioid-giganto-cellular granuloma with necrosis caseous (6).

Signs of obstruction of the lower apparatus such as dysuria, pollakiuria or perineal heaviness may be observed.<sup>[2,4]</sup> The clinical examination takes on all its importance, the purpose of which is to search for damage to the internal genitals. The rectal examination can

appreciate a prostate enlarged in volume, elastic consistency, firm or even stony or nodular as in our case. However, digital rectal data have no specificity and can be confusing with adenoma or prostate cancer. Morphologically<sup>[7]</sup>, ultrasound generally finds an enlarged prostate, heterogeneous echostructure with sometimes areas of calcification and necrosis.<sup>[2]</sup> As for the scanner, it can reveal multiple lesions of low density reaching the different lobes of the prostate.<sup>[5]</sup> However, other non-tuberculous prostatic abscesses can give similar aspects.<sup>[5]</sup> Thus, the diagnosis will be based on the search for BK in urine or seminal fluid. Negative, this research cannot rule out the diagnosis. However, the research of BK in seminal fluid appears to give the best results. Currently, tuberculosis serology by the enzyme-linked immunosorbent assay (Elisa) and the polymerase chain reaction (PCR) are the gold standard for the laboratory diagnosis of tuberculosis with sensitivity of 80% and 95% respectively.<sup>[5-8]</sup> Prostatic Biopsy is an element of choice for the diagnosis. Treatment is primarily medical using antibacillaries. The protocol, currently well codified, may, however, vary by country. The surgical treatment is only indicated for cases that respond little or not to medical treatment.<sup>[2]</sup> The basic rules for using these drugs are: "the judicious combination of at least 3 antibacillaries during the initial phase of treatment, the aim of which is to reduce the bacillary population as soon as possible to the level of lesions / sufficient duration of treatment / regular medication; and taking antibiotics on an empty stomach (6). Good medical treatment usually leads to a favorable outcome.

## CONCLUSION

Prostatic tuberculosis is a rare condition which poses the problem of differential diagnosis with the adenoma and prostate cancer because an increase in PSA plasma is often seen. It must be evoked in an elderly patient, especially in endemic countries tuberculous. Its treatment is based above all on antibacillaries associated with transurethral resection of the prostate in case of obstruction.

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