Blastomycosis of the prostate: a case report and literature review

Blastomicosis prostática: presentación de un caso y revisión de la literatura

To the Editor,

Blastomycosis is an endemic fungal disease, predominantly of the south central and midwest United States and some regions of Canada[1]. This disorder is caused by *Balstomyces dermatitidis*, a dimorphic organism usually acquired by inhalation of spores. Most acutely infected patients are asymptomatic or develop self-limited nonspecific respiratory symptoms. Chronic pneumonia is the predominant clinical manifestation of this disorder[1]. Extrapulmonary disease is common and usually occurs in the skin, subcutaneous tissue, bone, joints, and central nervous system, and cases have even been reported in the prostate gland and epididymis[1-3].

We performed a literature review of reported clinical cases of patients with prostate disorder from this disease and found not more than 10 cases, so we decided to share a clinical case from our institution.

The patient was a 70-year-old male, with a history of hypertension, complaining of acute urinary retention for the past 6 months, characterized by the presence of symptoms of lower urinary tract obstruction, with gradual reduction of caliber and force of urinary stream, straining to urinate, and nocturia up to 5 times a night, which progressed to acute urinary retention.

The only remarkable finding on physical examination was the presence of grade II benign prostatic hyperplasia.

Notable among laboratory findings was a normal blood count (hemoglobin: 12.9 g/dL; leukocytosis: 5,390; platelets: 180,000). Blood chemistry was normal (BUN: 14.4 mg/dL; Cr: 1.04 mg/dL). Prostate specific antigen was 8.3 ng/mL and one month later 5.3 ng/mL. Ultrasound examination in both kidneys revealed alteration of the medulla-cortex right with right predominance, mild bilateral ureteral dilatation, and a prostate gland volume of 60 cc.

Transrectal prostate biopsy was performed and revealed blastomycosis of the prostate (Fig. 1).

Treatment with oral itraconazole was started and transurethral prostate resection was scheduled and performed three weeks later. The pathological report of the specimen obtained was granulomatous prostatitis due to blastomycosis.

Two weeks later, the patient had a hemorrhagic stroke and died from its complications.

Blastomycosis is an unusual disease, whose transmission is respiratory, and of which cases have been reported in which it involved the genitourinary tract[4-6]. Its clinical manifestations are nonspecific, and usually range from mild self-limited respiratory symptoms to acute respiratory

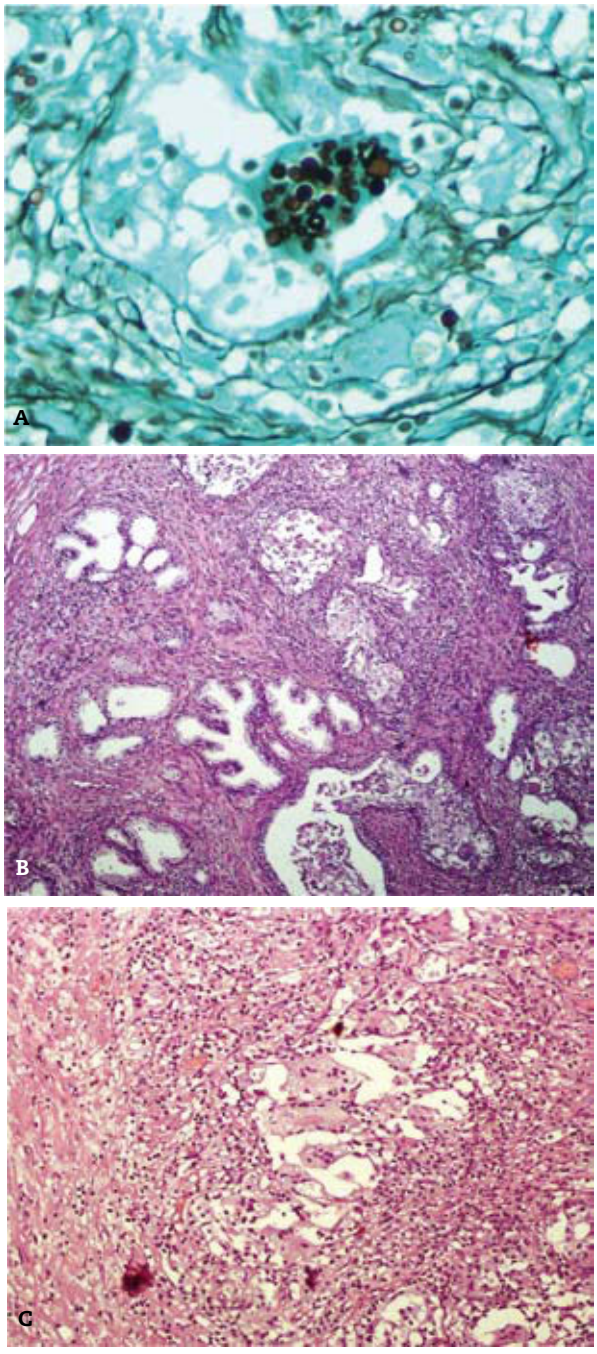

Figure 1 – Histopathological sections showing positive PAS (A), positive Grocott (B) and negative ZN (C) stain, leading to a diagnosis of granulomatous prostatitis from blastomycosis.

distress syndrome and/or involvement of the central nervous system[1].

In our case, the patient was mainly asymptomatic and presented for prostate symptoms secondary to benign prostatic hyperplasia, at which time diagnosis was made as a casual finding.

In our review, there was only one case of blastomycosis of the prostate alone[4], one with prostate and miliary involvement[7], the rest were reported as accompanied by epididymal involvement[3,6] and one by skin and prostate involvement[5].

There is a review conducted by Eickenberg et al in 1975[2] where 51 records of patients with systemic blastomycosis in North America were evaluated. Of these, 11 patients were found to have genitourinary disease, the epididymis and prostate being the most commonly affected organs.

As regards management, oral antifungal therapy is recommended, with itraconazole as the first-line agent. In patients with severe symptoms and/or immunocompromised hosts, the treatment of choice is based on amphotericin B[1].

To date, preventive measures for this disease are not known, although a possible vaccine with live attenuated organisms is presently under study[1].

Blastomycosis is a rare condition in our setting, difficult to diagnose because of its nonspecific symptoms, but apparently it usually has a certain predilection for the prostate gland and epididymis when the genitourinary tract is involved.

We recommend considering this entity, particularly in patients with chronic symptoms of lower urinary tract obstruction diagnosed with chronic nonbacterial prostatitis, since there might be more cases like this that are undiagnosed because of the lack of a screening for these patients.

It would be interesting to seek purposely this condition in cases of chronic nonbacterial prostatitis, in order to determine its true incidence, since there is a specific and effective treatment for this condition. A controlled and well standardized series is required to seek entities such as this as the cause of chronic nonbacterial prostatitis.

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Penile fracture. A report of two cases

Fractura de pene. A propósito de dos casos

To the Editor,

We report two cases of penile fracture, the second of which was associated with urethral injury.

The first clinical case was a 41-year-old male patient who came to the emergency department after noting a snapping sound from the penis during sexual intercourse followed by immediate pain and detumescence. Physical examination revealed a penile hematoma, which did not affect the perineal zone. There was no accompanying urethral bleeding or difficult to urinate. Urethral catheterization was performed on arrival to the ER, without complications. Surgical exploration was performed 6 hours later. A subcoronal incision was made to evacuate the large hematoma from the left corpus cavernosum, which was then irrigated, followed by suturing of the tunica albuginea and inspection of the corpus spongiosum, which was unaffected. The patient was kept with a urinary catheter for two weeks, followed by catheter removal, without incidents. In the first checkup one month after the operation, the patient had already recovered erection and did not have cosmetic sequelae.

The second clinical case was a 34-year-old male patient who came to the emergency department for pain, urethral