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.

REFERENCES

1. Pappas PG. Blastomycosis. Semin Respir Crit Care Med. 2004;25(2):113-21.
2. Eickenberg HU, Amin M, Lich R Jr. Blastomycosis of the genitourinary tract. J Urol. 1975;113(5):650-2.
3. Seo R, Oyasu R, Schaeffer A. Blastomycosis of the epididymis and prostate. Urology. 1997;50(6):980-2.
4. Bunge RG, Harness WN. Blastomycosis of the prostate: case report. J Urol. 1951;66(2):263-4.
5. Botvinick I. Blastomycosis of the skin and prostate. AMA Arch Derm Syphilol. 1950;62(6):936-7.
6. Smith PG, Suder GL. Blastomycosis of the epididymis and prostate: a case report. Urol Cutaneous Rev. 1950;54(7):398-9.
7. Burr AH, Huffines TR. Blastomycosis of the prostate with military dissemination treated by stilbamidine. J Urol. 1954;71(4):464-8.

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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

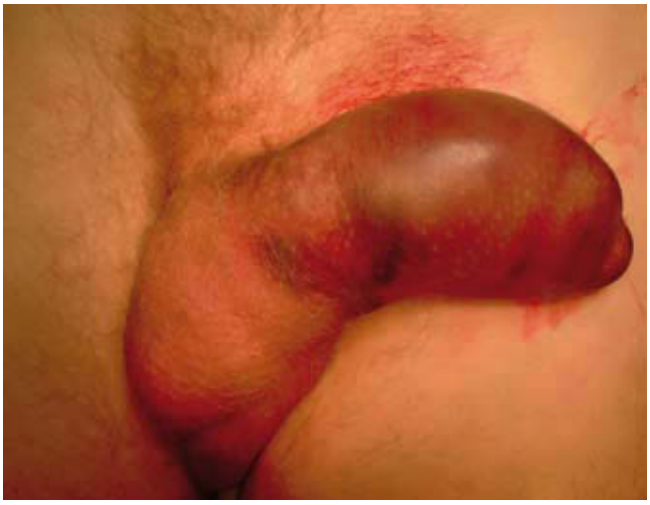

Figure 1 – Large subcutaneous hematoma with penile deviation.

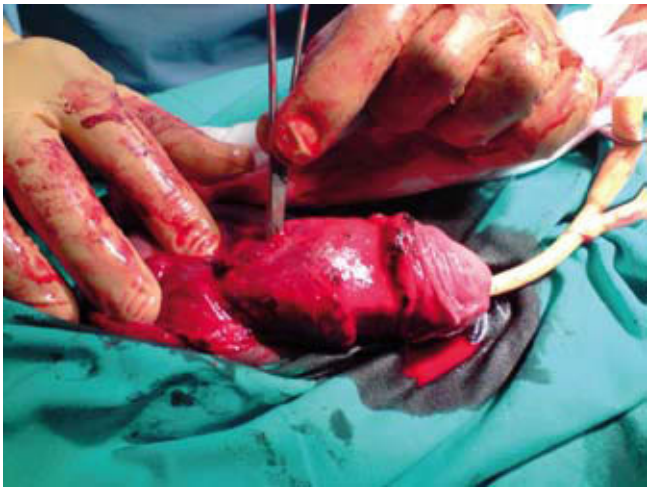

Figure 2 – Surgical exploration of right cavernosal body. Insertion of forceps for better visualization of the opening.

bleeding, and inability to urinate spontaneously after hearing a snapping sound from the penis during sexual intercourse. Physical examination revealed penile tumescence and hematoma with deviation of the penis to one side. He had spontaneous pain and pain on touch. There was no bladder distention, but the patient was unable to urinate. The rest of the perineal zone showed no alterations (Fig. 1). Urethral catheterization was not possible, and given the suspicion of corpus cavernosal rupture associated with urethral injury and gradually increasing hematoma, immediate surgical review was decided: a subcoronal incision with opening of the coverings to evacuate the large hematoma emerging from the opening caused by right corpus cavernosal rupture (Fig. 2). A small erosion in the urethra can be seen, after which the Foley catheter was visualized. The hematoma was cleaned by irrigating the corpus cavernosum with physiological saline. The tunica albuginea was sutured with absorbable 00 stitches with closure by layers and then skin, leaving the catheter in place as a urethral tutor. During the first 4-5 postoperative days, urethral bleeding persisted, subsiding with compression. The patient obtained complete erections from the third day.

In the first checkup at three weeks, the catheter was removed, and the patient voided spontaneously.

Penile fracture is a condition where rupture of one or both corpora cavernosa occurs, which may be associated or not with urethral injury when the penis is the erect state. It is an entity whose actual incidence is unknown, since many patients avoid seeking treatment out of embarrassment. Fracture may be accompanied by urethral rupture in up to 20-30% of cases, depending on the series[1-4], and when this occurs there is usually bilateral rupture, with clinical symptoms of urethral bleeding, presence of blood at the meatus, hematuria, difficulty for catheterization or inability to urinate.

The most common cause of penile fracture is sexual intercourse (33-58%)[4], since the tunica albuginea is thinner and tauter during erection and subject to increased intracavernous pressure, which causes the penis to be less resistant to angulation, therefore providing the mechanism for rupture. Diagnosis of this condition is based on the clinical history and physical examination. Some authors recommend performing imaging tests only when urethral injury is suspected[5] , others, on the other hand, recommend intraoperative flexible cystoscopy[6]. In our experience we chose surgical exploration under anesthesia, without previous examinations (SVCU, urethroscopy).

The treatment of choice is immediate surgical repair in the first 36 hours[7]; only some patients would benefit from conservative treatment. In our first case, we delayed surgery because of patient stability, since urethral catheterization could be performed without complications (we did not suspect urethral injury). In the second case, urethral injury was suspected, so we discarded catheterization and performed surgical exploration. Despite the fact that some authors recommend urethral dissection in these cases to perform a good anastomosis without tension, we only repaired the cavernosal body rupture with external urethral suturing. The results obtained in both cases were excellent, with no sequelae occurring in either patient, which may range from penile curvature (10-30% of deferred treatments)[7] to painful erections, fistulas urethrocutaneous fistula, cavernosal fistula, infection, fibrotic plaque, stricture and erectile dysfunction.

REFERENCES

1. Llarena Ibargueren R, Villafruela Mateos A, Azurmendi Arin I, García Fernández J, Pertusa Peña C. Fractura de pene con rotura asociada de uretra. Arch Esp Urol. 2006;59(7):732-6.
2. García Marchiñena P, Capiel L, Juárez D, Liyo J, Giudice C, Gueglio G, et al. Penile fracture with associated retra lesion: case report and bibliographic review. Arch Esp Urol. 2008;61(8):936-9.
3. Roy M, Matin M, Alam M, Suruzzaman M, Rahman M. Fracture of the penis with urethral rupture. Mymensingh Med J. 2008;17(1):70-3.

4. Martínez Ruiz J, Pastor Navarro H, Carrión López P, Giménez Bachs JM, Donate Moreno MJ, Virseda Rodríguez JA. Fractura de cuerpos cavernosos. Serie de casos. Actas Urol Esp. 2008;32(6):599-602.
5. Maruschke M, Lehr C, Hakenberg OW. Traumatic penile injuries - mechanisms and treatment. Urol Int. 2008;81(3):367-9.
6. Kamdar C, Mooppan UM, Kim H, Gulmi FA. Penile fracture: preoperative evaluation and surgical technique for optimal patient outcome. BJU Int. 2008;102(11):1640-4.
7. Juaneda Castell B, Montlleó González M, Ponce de León Roca X, Gausa Gascón Ll, Caparrós Sariol J, Villavicencio Mavrich H. Fístula uretrocavernosa por fractura penena. Actas Urol Esp. 2008;32(10):1043-5.

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Congenital renal arteriovenous malformation: the value of magnetic resonance imaging for dignosis and intravascular management

Malformación arteriovenosa renal congénita: utilidad de la resonancia magnética para el diagnóstico y abordaje endovascular

To the Editor,

We report the case of a 40-year-old male, with a history of renoureterales attacks, who came to the emergency department for right lumbar pain, intermittent hematuria and poor response to analgesic treatment.

Abdominal X-ray showed no images suggestive of lithiasis. However, urinary tract ultrasound showed an enlargement of the right kidney (RK) related to grade III/IV ureterohydronephrosis, with no images of lithiasis. Given the persistent pain, an urgent nephrostomy was placed. This maneuver caused the immediate onset of severe bleeding through the nephrostomy tube, requiring its withdrawal and transfusion of packed red blood cells.

During the patient's hospital stay, an abdominopelvic computed tomography scan was requested for a more comprehensive evaluation. The scan detected the presence of 4 indeterminate nodular images, with a similar density to the cortex, three in the upper half of the kidney in relation to medulla and a fourth in lower half, in contact with the renal sinus, whose measurements were: 1, 3.4, 3 and 2.8 cm, confirming enlargement of the RK, but not dilatation of the excretory system.

On subsequent magnetic resonance imaging (MRI), the varicose structures of the renal hilus showed the typical "signal void" of blood in movement in T2 sequences, and after contrast administration, they showed intense enhancement in the arterial phase with rapid filling of the right renal vein, all of which was consistent with congenital arteriovenous malformation (AVM) of the RK with associated arteriovenous fistula (Fig. 1). Renal Doppler ultrasound served as a dynamic study to confirm the diagnosis.

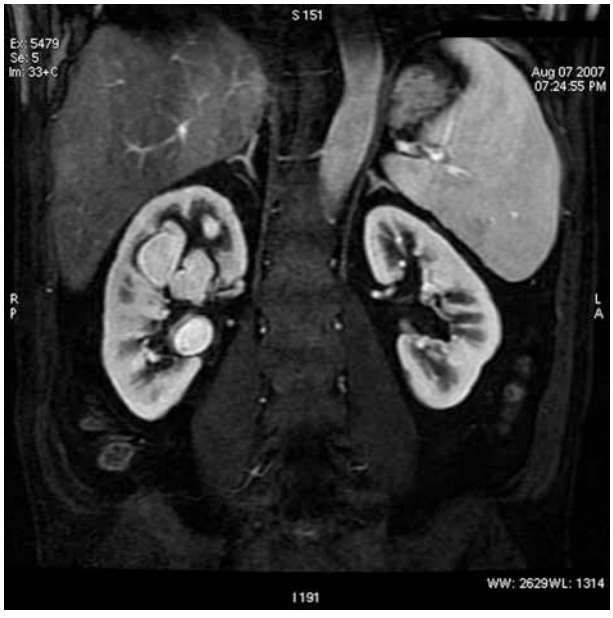

Figure 1 – MRI showing filling cavities with paramagnetic contrast in T1 sequences.

An arteriography was performed prior to embolization in which 4 vascular tangles were visualized in the right renal sinus, an opacified nephrographic phase in the RK and early