



RELATO DE CASO

Lithiasis in prostate utricle: a case of infertility

Litíase em utrículo prostático: um caso de infertilidade

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ABSTRACT

Prostatic utricle cyst is a structure remaining from the Müllerian duct, resulting from the incomplete regression of these structures during the development of the embryo. The incidence varies from 1 to 5% in the general population and up to 20% of the patients complain of hematospermia, which could be associated with a urinary infection, pain and urinary urge incontinence, palpable abdominal mass and epididymitis. The diagnosis is based on physical examination and transrectal ultrasonography, and complemented with a cystourethrography. Magnetic resonance imaging may also be used. Most of the time treatment consists of endourologic procedures, with marsupialization of the cyst.

Indexing terms: Azoospermia. Müllerian duct. Infertility. Lithiasis. Health and utricle.

RESUMO

Cisto de utrículo prostático é uma estrutura remanescente do ducto mülleriano, resultado da regressão incompleta destas estruturas durante o desenvolvimento

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embrionário. Apresenta incidência de 1 a 5% na população geral e de até 20% dos pacientes com queixa principal de hemospemia, podendo estar associado a episódios de infecção urinária, dor e urgeincontinência, tumoração abdominal palpável e epididimites. O diagnóstico é baseado no exame físico e ultrassonográfico trans-retal, complementado com uretrocistografia, e pode ser realizada ainda a ressonância magnética. O tratamento, na maioria das vezes, é realizado por meio de procedimentos endourológicos, com a marsupialização do cisto.

Termos de indexação: Azoopermia. Ductos paramesonáfcos. Hemopermia. Infertilidade. Litíase. Saúde e utrículo.

INTRODUCTION

Prostatic utricle cysts is an embryological remnant of the Mullerian duct system, resulting in incomplete regression of this structures during embryo environment. Isolated persistent mullirian structures comprise either prostatic utricles or mullerian duct cysts¹. This situation occur most frequently in males with perineal or peno-scrotal hypospadias²⁻⁴. This cysts can attain great size, they may become palpable abdominally and are associated with clinical symptoms. They are most often found in men during the second or third decade of age¹. In the literature this is a prenatally detected large pelvic cyst that turned out to be a giant prostatic utricles⁵.

It is found in 1% - 5% of general population and 20% of hematospermic patients. Utricular cysts may present with various signs and symptoms including urinary tract infections, pain and post void incontinence, palpable abdominal tumor, recurrent epididymitis and hematospermia^{3,4}, and the most commom are hematospermia and ejaculatory duct obstruction¹.

The diagnosis is based in physical exammination and radiographic studies, mainly urethrocystography. The investigation can be associated with trans-rectal ultrasonography and magnetic resonance. The prostatic communication is not always demonstrated⁶.

CASE REPORT

We present a case of 37-year-old man complaining for 6 month of intermittent, nonpainful hematospermia and infertility, azoospermy. He had two episodes of acute prostatitis before

hematospermia starting. He has infertile for 2 years, and your wife was gynecological system perfect. In the physical examination there is no tumor palpable in the abdomen. The urethral meatus was in anatomical correct position and the digital rectal examination was normal with a 35grs, nonpainful prostate.

Trans-rectal ultrasound showed a complex prostatic utricle cyst, with 2,3cm diameter. Radiographic studies, urethrocystography, revealed the presence of something dense into the utricle cyst. A magnetic resonance was done and show us an imaging suggested of lithiasis inside the utricle cyst.

The treatment was, initially based in urethrocystoscopy when us visually an tumor in ejaculatory meatus, and done endoscopic marsupialization, with Sachse knife (Figure 1) and complete removal of the calculus (2,7cm diameter). It was a ambulatorial surgical procedure.

Acctually, the pacient remains asymptomatic and his spermatic exam is normal.

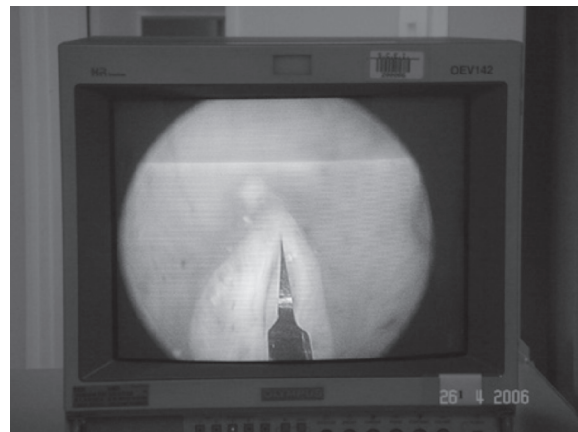


Figure 1. Endoscopic procedure.

DISCUSSION

Prostate utricle cysts is a rare condition, there are few articles in the literature mention about this subject. Present 1% - 2% in general population and 22% in the patients with hemospermia.

To confirm the diagnosis one must exclude different origins for midline cyst such as prostate cyst, seminal vesicle, ejaculatory duct and müllerian duct^{2,3}. This have an important characteristic, the müllerian duct cyst are midline and contain no spermatozoa, and the differential diagnosis for a midline cyst in this region is a diverticulum of the ejaculatory duct or ampulla of the vas deferens⁶.

We have to be attention in cases like presenting by Agrawal *et al.*⁷, that large müllerian duct cyst was accidentally aspirated during penile prosthesis implant, when the principal symptom was of severe long-standing postejaculatory pain and the obstruction ejaculatory ducts was confirmed by pre and postejaculatory trans-rectal ultrasound.

Trans-rectal ultrasound is used as the first line investigation, and urethrocytography like complementary exam. Usually these methods are sufficient for diagnosis, eventually the magnetic resonance can be done⁸.

Seminal vesicle amyloidosis was studied by Kato and Furuya⁸, and the trial was proved in 4 men of 56 patients with hemospermia, after specimens obtained by biopsy. Then, amyloid deposits in the subepithelial tissue of the seminal vesicles can causes of isolated or recurrent hemospermy. These appeared in the magnetic resonance imaging are T2-weighted images of low intensity, representing amyloid deposit and the hemospermia resolved spontaneously in all patients in a average of 14 months^{9,10}.

Treatment is reserved for symptomatic cysts or infertile patients, and various techniques have been described including transurethral deroofting, endoscopic incision or surgical excision by supra-pubic, posterior and midline transvesical approaches. The endoscopical marsupialization of the müllerian duct cyst is indicated,

offering a high cure/improvement rate in this group of patients without secondary effects⁴.

Actually the laparoscopic excision is also a rather attractive opinion for surgical treatment of symptomatic utricle cyst^{8,11}.

Prostate utricle cysts is a rare condition and a important cause of infertility.

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