WW Med 2019 Vol:1 Issue:6 199-201

Worldwide Medicine

Case Report

Prostatic cyst: incidental finding on ultrasound.

Alain Mwamba Mukendi[1], Florence Mahlobo[2], Sean Doherty[1]

[1]*Department of Urology, Chris Hani Baragwanath Academic Hospital, University of the Witwatersrand, Johannesburg, South Africa*

[2]*Department of Radiology, Chris Hani Baragwanath Academic Hospital, University of the Witwatersrand, Johannesburg, South Africa*

Received: 9 August 2019 / Accepted: 16 August 2019

Abstract

Prostatic cyst is a less common cystic condition of the urinary tract. Different types of intra-prostatic cysts have been described in the literature alongside different presentations. Midline intraprostatic cysts are mostly located posteriorly. We report a case of an incidental finding of anteriorly located midline prostatic cyst in a patient who presented with right epididymitis and briefly discuss clinical and management of this rare entity.

Keywords: Cyst; prostate; mullerian duct

Introduction

Prostatic cyst is uncommon with a prevalence ranging from 0.5% to 7.9 %. Generally asymptomatic and mostly incidentally found during abdominal ultrasound, magnetic resonance imaging or computerized tomography (CT) scan.[1] Midline prostatic cysts in particular are very infrequent and arise from embryonic remnants, the Mullerian duct and utricle. They are mostly located posteriorly.[2] We present a case of an anteriorly located midline prostatic cyst associated with right epididymitis.

Case Presentation

23-year-old male presented with a 2-week history of right testicular pains not associated with any lower urinary tract symptoms. He was sexually active and had a previous history of sexually transmitted infection and no other significant medical or surgical history. Physical examination was marked by an enlarged and tender right epididymis. Bedside ultrasound of the bladder for pre-void volume led to an incidental finding of an anterior midline prostatic cyst 10mm X 8mm (Fig. 1a-b); scrotal ultrasound revealed an enlarged right epididymis with increased blood flow in it. Uroflowmetry was normal with a maximum flow of 25 mls per second with no residual volume. Right epididymitis was diagnosed and successfully managed with azithromycin 1 g per os and ceftriaxone 250 mg IM both stat.

Corresponding Author: Alain Mwamba Mukendi, M.D., Department of Urology Chris Hani Baragwanath Academic Hospital, University of the Witwatersrand, South Africa, E-mail: alainmwamba2006@yahoo.fr

DOI: 10.5455/ww.60780

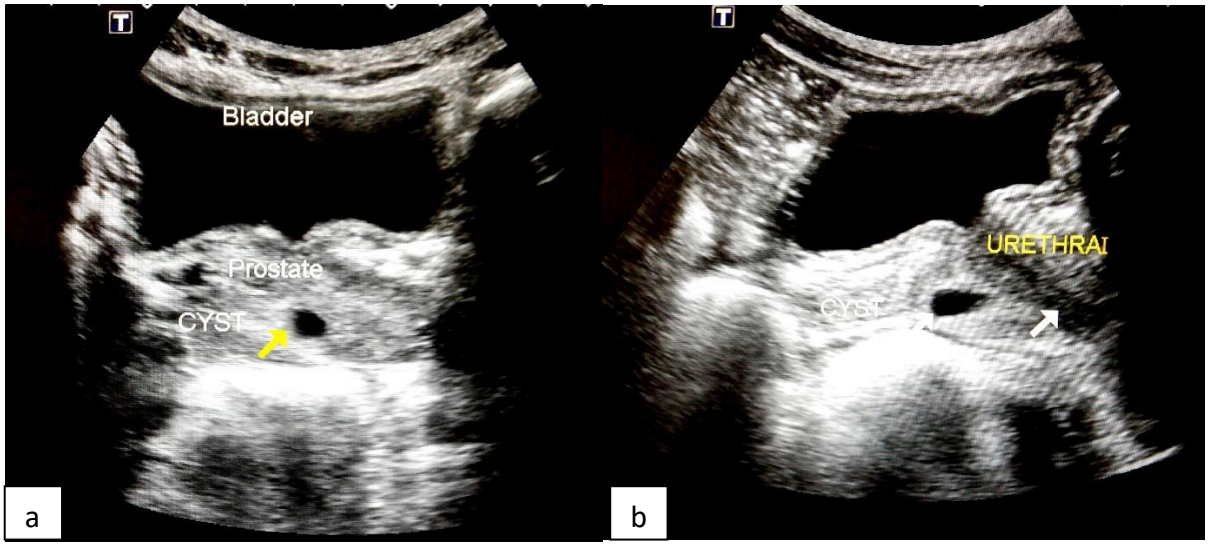

Figure 1a-b. Transabdominal ultrasound showing in transverse (a) and longitudinal (b) views, anterior midline prostatic cyst.

Discussion

Prostatic cysts are not only rare but most importantly are asymptomatic conditions. Symptoms mainly depend on their size, the larger they are (>2.5 cm) the more likely they are symptomatic. If symptomatic, they may present as bladder outlet obstruction, epididymitis, painful ejaculation, recurrent urinary tract infections, urinary retention, urinary incontinence, hematuria, hematospermia, oligospermia, decreased ejaculate volume, pyuria, lower abdominal discomfort, constipation, lower urinary tract symptoms, infertility, perineal pain or pelvic pain.[1] In our case whether or not the right epididymitis was related to the prostatic cyst, he did not have any other symptoms except right testicular pains.

Lower urinary tract cysts are categorized into extra-prostatic or intra-prostatic. Extraprostatic category include Cowper ducts cysts, vas deferens cysts, and seminal vesicle cysts. The intraprostatic category can be further divided into three subgroups: median cysts (e.g. prostatic utricle), paramedian cysts (e.g. ejaculatory ducts), or lateral cysts (e.g. cystic degeneration of benign prostatic hyperplasia).[3] Our case was an anteriorly located median cyst and only about five cases have so far been reported.[4]

Differential diagnoses include prostatic utricle cyst, enlarged prostatic utricle, mullerian duct cysts, wolffian duct cyst, cyst of the ejaculatory ducts, parenchyma cyst, cystic tumors (cystic adenoma, cystic adenocarcinoma), seminal vesicle cyst, bladder diverticulum.[1,5] It is important to note that mullerian duct cysts are midline cysts and may be attached to the verumontanum by a stalk and do not contain sperms nor associated with urogenital anomalies whereas wolffian duct cysts contain sperms, are off the midline and associated with urogenital anomalies such as ipsilateral renal agenesis.[5] Also, Mullerian duct cysts tend to be teardrop-shaped, bigger than utricle cysts and can extend above the base of the prostate. They do not communicate with the prostatic urethra whereas utricle cysts do.[3]

Management of asymptomatic intraprostatic cysts is mainly conservative.[2] For symptomatic cysts, treatment options include perineal or transrectal ultrasound-guided drainage or aspiration with or without sclerotherapy, endoscopic transurethral resection or transurethral marsupialization of the cyst wall with holmium: YAG laser, and open surgery.[1,6]

Conflict of interest

No

References

1. Qiu Y, Liu Y, Ren W, Ren J. Prostatic cyst in general practice: A case report and literature review. Medicine (2018) 97:9(e9985).

2. Thong Da W, Kong CY, Lee GE. Midline intraprostatic cyst: an unusual aetiology of urinary tract infection and epididymo-orchitis. Ann Acad Med Singapore 2013 Oct;42(10):547-8.

3. Priyadarshi V, Singh JP, Mishra S, Vijay MK, Pal DK, Kundu AK. Prostatic Utricle Cyst: A Clinical Dilemma. APSP J Case Rep 2013; 4(2): 16.

4. Lee JY, Kang DH, Park HY, Park JS, Son YW, Moon HS et al. An Anteriorly Positioned Midline Prostatic Cyst Resulting in Lower Urinary Tract Symptoms. INJ 2010; 14:125-129

5. Feutry G, Perrot TD, Wirth GJ, Montet X, Martin SP. Prostatic Utricle Cyst as the Most Likely Cause in a Case of Recurrent Episodes of Hematospermia. Case Reports in Urology Volume 2017, Article ID 7502878, 3 pages.

6. Kilinc M, Goger YE, Piskin M, Balasar M, Kandemir A. Midline Prostatic Cyst Marsupialization Using Holmium Laser. Case Reports in Urology Volume 2015, Article ID 797061, 3 pages.