

An abnormally large prostatic utricle cyst associated with unilateral renal agenesis

Yasmin A. Momin, Nitin P. Dhende¹, Bharat A. Ghodke, Sameer A. H. Ansari, Grace F. D'Costa, Vinod R. Mahajan²

Departments of Pathology, ¹Paediatric Surgery, ²Pathologist, Grant Medical College, Mumbai, India

Abstract Prostatic utricle cyst is an uncommon congenital disorder associated with urogenital anomalies. We present a case of an abnormally large prostatic utricle cyst filling the whole of the abdominal cavity with unilateral renal agenesis in an 8-year-old male child.

Key Words: Prostatic utricle cyst, unilateral renal agenesis, urogenital, anomaly

Address for correspondence:

Dr. Mrs. Yasmin A. Momin, Department of Pathology, Grant Medical College, Mumbai, J J Hospital, Byculla, Mumbai, India. E-mail: tahaarsh@yahoo.com

Received: 03.08.2011, Accepted: 28.09.2011

INTRODUCTION

Utricle is derived from the Latin word “pouch,” which forms a cul-de-sac 6 mm long, located in the verumontanum between two ejaculatory ducts. It extends upwards and backwards in the median lobe of the prostate. Prostatic utricle cyst, also called as prostatic utricular cyst,^[1] is an area of focal dilatation occurring in the prostatic utricle ranging from few millimeters to 2 cm.^[2] Very few cases have been reported in the literature. To our knowledge, this is the first case of such an abnormally large-sized prostatic utricle cyst.

CASE REPORT

An 8-year-old male child was admitted for painful micturition along with high-grade fever with gradually progressive increasing abdominal girth since 3 weeks. There was no history of hematuria, jaundice or tuberculosis. On examination, a diffuse, tender, tense swelling was seen over the lower abdomen. Per

rectal examination showed a cystic pelvic mass. He was further investigated with a probable diagnosis of cystic teratoma and duplication cyst. On contrast-enhanced computed tomography (CT), a large cystic lesion was seen posterior to the bladder at the prostatic utricle [Figure 1]. CT abdomen revealed a large, well-defined, thick-walled, fluid density lesion measuring 14 cm × 11 cm × 9 cm arising from the pelvis in the posterior vesical, prerectal space extending superiorly above the umbilicus [Figure 2]; the urinary bladder and bowel loops are displaced. Left kidney and ureter were not visualised [Figure 3]. Right ureter was stretched over the lesion and compressed in its lower 1/3rd. Mild hydronephrosis and hydroureter was noted. He underwent laparotomy with excision of the infected cyst. We received an already cut-opened, large, thick-walled cyst measuring 12 cm × 10 cm × 9 cm. The inner surface was trabeculated. Histopathological examination showed a fibromuscular, fibrocollagenous cyst wall lined extensively by exuberant granulation tissue [Figure 4] partly lined by flattened cuboidal epithelium [Figure 5]. In view of the clinical findings, a diagnosis of prostatic utricle cyst was rendered.

DISCUSSION

Prostatic utricle cyst is usually seen during the first to second decades of life, with a mean age range of 26 years. The cyst typically lies between the bladder and the rectum^[3] and, thus,

Access this article online	
Quick Response Code:	Website: www.urologyannals.com
	DOI: 10.4103/0974-7796.110016

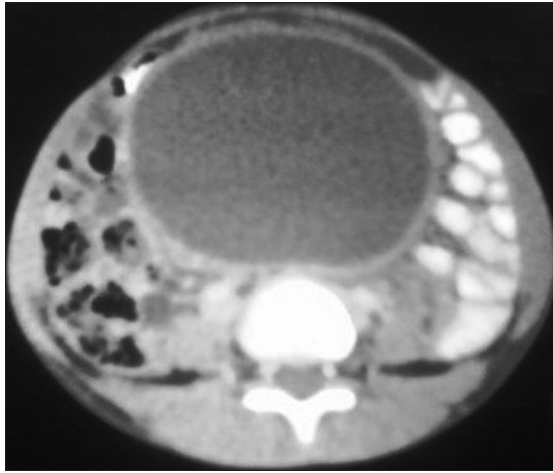


Figure 1: Contrast-enhanced computed tomography showed a huge, cystic mass behind the bladder



Figure 2: Computed tomography abdomen revealed a large, well-defined, thick-walled lesion in the posterior vesical, prerectal space extending superiorly above the umbilicus

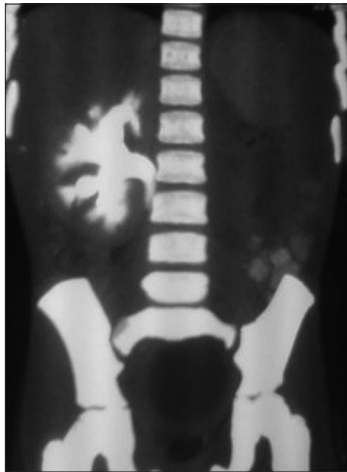


Figure 3: Contrast-enhanced computed tomography-right kidney showed mild hydronephrosis and hydroureter with left renal agenesis

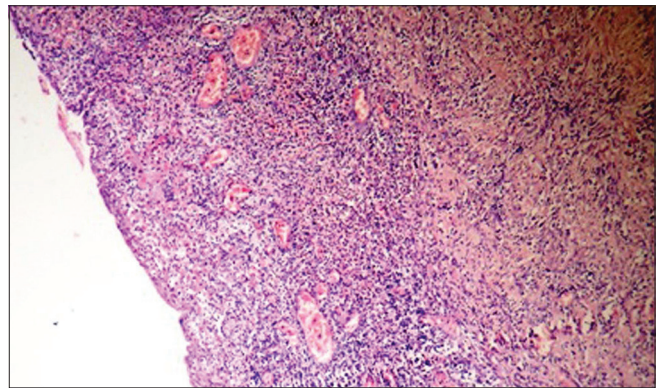


Figure 4: Microscopically, a fibrocollagenous cyst wall was seen extensively lined by exuberant granulation tissue (H and E, x10)

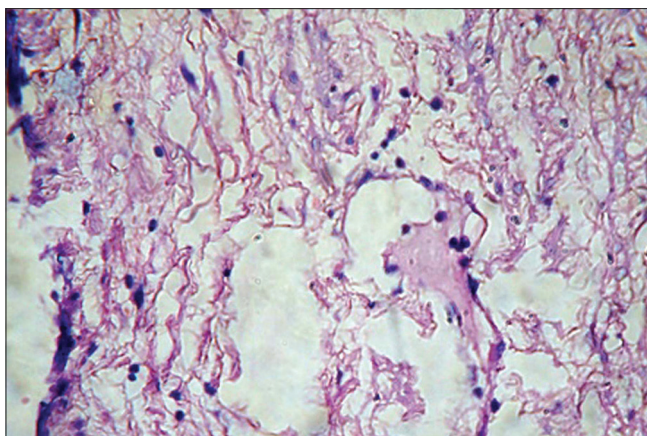


Figure 5: High-power view showing cyst wall partly lined by flattened cuboidal epithelium

is palpable on per rectal exam in 50% of the cases.^[4] Ten percent to 25% of the cases show an association of renal agenesis/dysgenesis, and 25% cases have hypospadias.^[4,5]

Our index case presented at the age of 8 years with associated renal agenesis. Poor emptying leads to retention of urine, stasis, infection and even stone formation in the cyst.^[2] Patient presents with hematuria, irritative urinary symptoms or urethral discharge. Our case had similar irritative urinary symptoms. Voiding cystourethrogram (VCUG) and retrograde urethrography (RUG) can define the utricle size, which usually ranges from a few millimeters to more than 2 cm. Our case had attained a very huge size that filled almost the whole abdominal cavity. Persistence or untreated prostatic cyst could be a cause of infertility. Close differential diagnosis is Mullerian duct cyst, which was previously termed by some authors as synonyms, but recently Shapiro *et al.* have shown different origins of these two conditions. Prostatic utricle cyst is always in the midline, presents during the first to second decade of life, has a urogenital sinus origin and has an association with unilateral/bilateral renal agenesis and hypospadias, whereas Mullerian duct cyst is usually seen above the prostate, is seen in the older age group ranging from 2 to 75 years, originates due to failure of fusion of Mullerian duct resulting from

deficient Mullerian inhibitory factor and associated with intersex conditions. In our case, no intersex morphology was seen. Morphologically, prostatic utricle cyst appears as a small, single, smooth, unilocular cyst of variable size. The cyst lining is cuboidal, columnar, squamous or transitional type.^[4] Many a times, the lining epithelium is not evident, as was seen in our case. Nonsurgical treatment includes transurethral cyst catheterisation, unroofing and electrofulguration. Surgical excision is the treatment of choice, but is challenging due to its close proximity to the vas deferens, ejaculatory ducts and pelvic nerves.^[3] Posterior approach is successful.^[5] Complications include impotence and rectal injury. Malignancy may arise in 3% of the cases, Squamous cell carcinoma is known to occur.^[3] Our index case has tolerated the procedure well and is fine.

REFERENCES

1. Mcdermott VG, Meakam JJ 3rd, Solpen AH, Schnall MD. Prostatic and peri prostatic cysts findings of MRI. *Am J Roentgenol* 1995;164:123-7.
2. Curran S, Akin O, Agildere Am. Endorectal MRI of prostrate and periprostatic cystic lesions and its mimics. *Am J Roentgenol* 2007;188:1373-9.
3. Schuhrke TD, Kaplan GW. Prostatic utricle cyst. *J Urol* 1978;11:765-7.
4. Epstein JI. The prostate and seminal vesicle. In: Mills SE, editor. *Sternberg's diagnostic surgical pathology*, 4th ed. India: Jaypee brothers publisher; 2000. p. 2083-132.
5. Kato H, Komiyama I, Maejima T, Nishizawa O. Histopathological study of mullerian duct remnant: Clariification of disease categories and terminologies. *J Urol* 2002;167:133-6.

How to cite this article: Momin YA, Dhende NP, Ghodke BA, Ansari SA, D'Costa GF, Mahajan VR. An abnormally large prostatic utricle cyst associated with unilateral renal agenesis. *Urol Ann* 2013;5:129-31.

Source of Support: Nil, **Conflict of Interest:** None.

Announcement

iPhone App



Download
iPhone, iPad
application

FREE

A free application to browse and search the journal's content is now available for iPhone/iPad. The application provides "Table of Contents" of the latest issues, which are stored on the device for future offline browsing. Internet connection is required to access the back issues and search facility. The application is Compatible with iPhone, iPod touch, and iPad and Requires iOS 3.1 or later. The application can be downloaded from <http://itunes.apple.com/us/app/medknow-journals/id458064375?ls=1&mt=8>. For suggestions and comments do write back to us.