

Case report

DOI: <http://doi.org/10.4038/slju.v13i0.4068>

Seminal vesicle cyst presenting with acute retention of urine

W. A. S. de Silva, K. D. C. Quintus and S. Rajasinghe

Department of Urology, Teaching Hospital Kurunegala, Sri Lanka.

Introduction

Acute retention of urine is defined, as painful retention of urine with residual urine of more than 300 ml. Commonest cause in an adult male is benign prostatic hypertrophy. Other causes include impacted calculus in urethra, foreign bodies in urethra, prostate cancer, urethral stricture, bladder calculi and bladder cancer. We present an unusual case of acute retention from a large seminal vesicle cyst.

Case report

A 52 year-old male patient presented with a history of poor flow, hesitancy for 3 to 4 months with constipation. He developed acute retention of urine several weeks later. Examination revealed a tender distended pelvic mass. Digital rectal examination revealed a small clinically benign prostate and a fluctuant mass in retro-vesicle pouch.

Ultra sound scan revealed a cystic mass 9.1 cm x 9 cm x 9.3 cm behind the bladder (Figure 1). Computed tomography (CT) confirmed that a large cystic mass apparently arising from the left seminal vesicle displacing the bladder anteriorly and compressing the rectum (Figure 2).



Figure 1. USS showing the bladder and cystic lesion.

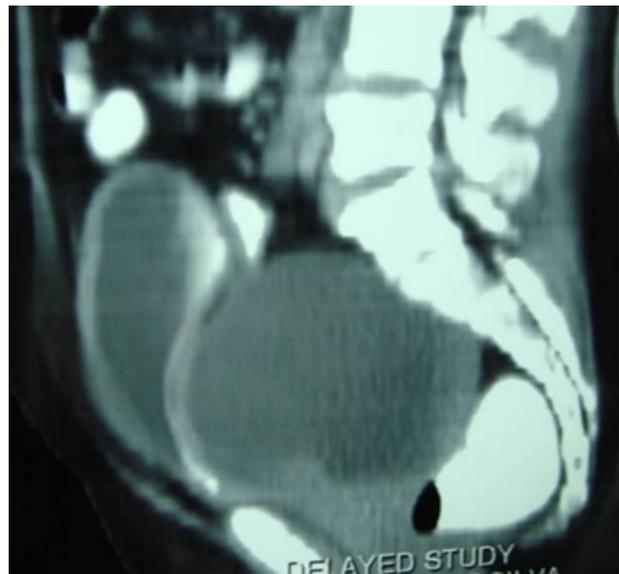


Figure 2. Coronal section through pelvis.

Following urethral catheterization, 400 ml of urine was drained but a large residual pelvic lump was still palpable abdominally. He underwent exploratory laparotomy and found to have a large cystic mass in the pelvis compressing the rectum and displacing the urinary bladder anteriorly. Cyst was aspirated and excised fully. Subsequent histological examination confirmed a benign seminal vesicle cyst.

Discussion

Seminal vesicle cyst is an uncommon entity and could present with different symptomatology (1). They could be congenital or acquired (2). Most are congenital cysts and usually occur as a solitary lesion (3,4). The etiology behind the formation of seminal vesicle cysts is thought to be due to obstruction of the ejaculatory duct. Many other associated anomalies have been described, ipsilateral renal agenesis is the commonest among them (5).

Small congenital seminal vesicle cysts are usually asymptomatic. When symptomatic, they can present



with a wide range of clinical features related to urethra, bladder, bowel and prostate namely dysuria, perineal pain, features of bladder outlet obstruction and prostatitis, epididymitis and constipation. Very large cysts may be palpable abdominally (6). Large seminal vesicle cysts can present with acute retention of urine (7). Symptomatic congenital cysts usually present between the ages of 18 to 40 but late presentations are possible as in this patient.

Differential diagnosis includes benign tumours of seminal vesicles, mullerian duct cysts, prostatic cysts, diverticula of the ejaculatory duct and malignant tumours of the seminal vesicles.

Transrectal Ultrasound examination is the initial imaging method of choice and seminal vesicle cysts are seen as paramedian cysts (7,8). CT scan will accurately define the pelvic anatomy and helps to assess the associated renal anomalies. MRI provides the most accurate assessment of cystic masses in the abdomen and pelvis. Asymptomatic seminal vesicle cysts do not require intervention. However, large symptomatic cysts need intervention to relieve symptoms and several approaches have been described. Surgical techniques range from transurethral drainage into bladder to open and laparoscopic (9) excision through transperitoneal route.

References

1. Altunrende F, Kim ED, Klein FA, et al. Seminal vesicle cyst presenting as rectal obstruction. *Urology*. 2004; 63: 584-5. [PubMed]
2. King BF, Hattery RR, Lieber MM, Berquist TH, Williamson B Jr, Hartman GW. Congenital cystic disease of the seminal vesicle 1. *Radiology* 1991; 178: 207-11.
3. Surya BV, Washecka R, Glasser J, Johanson KE. Cysts of the seminal vesicles. Diagnosis and management. *Br J Urol* 1988; 62: 491-3.
4. Beeby DI. Seminal vesicle cyst associated with ipsilateral renal agenesis: case report and review of literature. *J Urol* 1974; 112: 120-2.
5. Chen HW, Huang SC, Li YW, et al. Magnetic resonance imaging of seminal vesicle cyst associated with ipsilateral urinary anomalies. *J Formos Med Assoc*. 2006; 105: 125-31. [PubMed]
6. Negi SC, Dhiman ML, Gupta R. Large seminal vesicle cyst obstructing the ureter of a solitary kidney. *Br J Urol* 1998; 82: 446-7.
7. Gregory Bernstein, Jessica Kehren, Keith Kaplan, Pil Kang and David Mcleod Acquired seminal vesicle cyst causing acute urinary retention and hydronephrosis. *The Journal of Urology* 10/2004; 172(3): 1010-1.
8. B Patel, S Gujral, K Jefferson, S Evans, R Persad Seminal vesicle cysts and associated anomalies. *BJU International* 2002; 90: 265-71.
9. Anmar Nassir. Symptomatic cystic seminal vesicle: a laparoscopic approach for effective treatment. *Can Urol Assoc J*. 2009; 3(6): E81-E83.