

## Seminal Vesicular Cyst: About 2 Case Report

Nizar Cherni<sup>1</sup>, Abdallah Chaachou<sup>1</sup>, Wael Ferjaoui<sup>2\*</sup>, Samir Ghozzi<sup>1</sup> and Mohamed Dridi<sup>1</sup>

<sup>1</sup>Department of Urology, Military Hospital of Tunis, Tunis, Tunisia

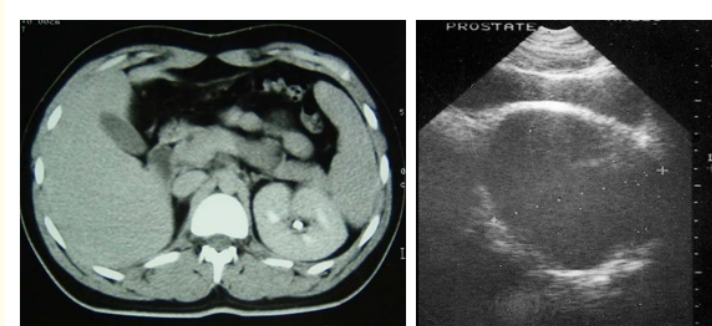
<sup>2</sup>Department of General Surgery, Military Hospital of Tunis, Tunis, Tunisia

\*Corresponding Author: Wael Ferjaoui, Department of General Surgery, Military Hospital of Tunis, Tunis, Tunisia.

Received: March 06, 2023; Published: March 16, 2023

### Case Report 1

The patient was 34 years old and was admitted to the urology department for febrile pelvic pain associated with functional disorders such as pollakiuria and dysuria. Two months earlier, he had been hospitalised and treated for acute prostatitis. At that time, a pelvic ultrasound scan showed the absence of the right kidney and a prostatic abscess in the presence of a hypoechoic, well-limited image in the prostatic cavity with a volume of 250 cm<sup>3</sup>. A puncture was performed and the cytobacteriological study of the fluid collected revealed *Escherichia coli*. The examination during this second admission revealed, apart from the fever, an extremely painful rectal touch and pain in the hypogastrium. The rest of the examination was unremarkable. Ultrasound and uroscanner showed images suggestive of a clean-walled retrovesical cystic mass, pushing the bladder forward and to the left, a single left kidney in compensatory hypertrophy (Figure 1). The extraperitoneal approach is carried out through an iliac incision, allowing the individualisation of a cystic formation, the dissection of which is extremely difficult due to the numerous adhesions to the bladder but especially to the prostate.



**Figure 1:** Right renal agenesis with Left kidney in compensatory hypertrophy with seminal vesicle cyst.

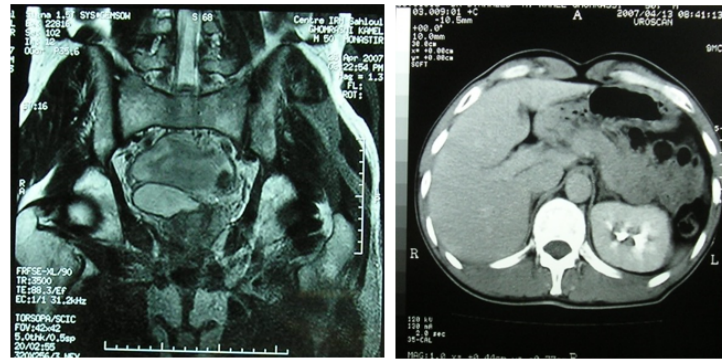
The blind right ureter terminates in this mass. All these structures are removed. A ureterovesical reimplantation was performed.

Anatomopathological study revealed a cystic seminal vesicle with brownish viscous contents, to which the ectopic right ureter and the vas deferens terminate.

This was a seminal vesicle cyst associated with right renal agenesis and an ipsilateral ectopic ureter. The follow-up was simple and the patient is currently asymptomatic.

### Case Report 2

The patient was 46 years old, with no previous pathological history. He was admitted with an incidental finding of a seminal vesicle cyst. The clinical examination was normal. Ultrasound and CT scans supplemented by abdominal and pelvic MRI concluded that the patient had a right seminal vesicle cyst associated with right renal agenesis (Figure 2). The patient refused an ultrasound guided puncture of the cyst. He is currently asymptomatic.



**Figure 2:** Right seminal vesicle cyst with right renal agenesis.

### Discussion

The most common malformation is renal agenesis, followed by ectopic termination of the ipsilateral ureter.

Ectopic ureteral discharge is into the bladder neck or prostatic urethra (54%), into the seminal vesicle itself (28%) or into the ejaculatory duct (10%).

Acquired obstruction of the ejaculatory duct may also be responsible for the development of KVS, secondary to distension of the gland by the accumulation of secretions. This obstruction may be secondary to a genitourinary infection, prostate resection or a stone in the ejaculatory duct.

The age of onset can be life long, but the lesions are mainly seen after puberty in young adults.

The diagnosis of this anomaly is most often fortuitous, made on the occasion of an ultrasound or intravenous urography performed for any other cause and showing renal hypoplasia or agenesis. More rarely, it is responsible for an irritative syndrome of the lower urinary tract with sometimes dysuria or bladder retention or perineal pain on ejaculation or defecation, or a urinary tract infection, epididymitis or prostatitis.

KVS may also manifest itself as haemospermia or infertility [8]. The digital rectal examination is a key examination in the diagnosis of this condition. It allows the cyst to be palpated as a renal mass occupying the ipsilateral prostatic hemi-logum.

Endorectal ultrasound is of great diagnostic value, finding an anechogenic image with posterior enhancement.

Trans-rectal ultrasound can also be used to guide drainage of the cyst, which may be therapeutic or cytobacteriological in the case of infection [5].

Vesiculodeferentography can contribute to the diagnosis, showing either a cystic dilatation of the seminal vesicle or a cyst communicating or compressing the vesicle. IVUS often shows a homolateral lower ureteral displacement, the imprint of the cyst on the bladder wall or a lacunar image on the cystogram, as well as associated malformations.

In case of doubt, CT or MRI rectifies the diagnosis and shows associated anomalies, in particular renal agenesis [4]. However, the contribution of MRI seems to be greater than that of CT in terms of pelvic cystic pathology, as it allows the cyst to be related to its origin and to better study its relationships with the other organs.

Despite the progress in imaging, a VSK may still pose the problem of differential diagnosis with other anomalies, such as a cyst of the ejaculatory duct or of the ducts of the prostate glands, a cyst of the mullerian remnant, an ectopic ureterocele.

Several therapeutic options have been proposed to treat symptomatic forms, ranging from surveillance, simple puncture-aspiration of the cyst by trans-rectal or trans-perineal route, via endoscopic resection, to surgical removal by conventional or laparoscopic route [2,3].

Aspiration of the cyst is often associated with recurrence [3]. Cystectomy or cysto-vesiculectomy is a procedure that is often laborious, especially in the case of an infectious history. The transperitoneal laparoscopic approach is less invasive and allows better removal of the VSK [1,2,3,5-7].

### Bibliography

1. Adrienne JKC., *et al.* "Novel use of da vinci robotic surgical system: Removal of seminal vesicle cyst in previously dissected pelvis". *Urology* 67 (2006): 199.e3-199.e5.
2. Basillote JB., *et al.* "Laparoscopic excision of a seminal vesicle cyst in a child". *The Journal of Urology* 17 (2004): 369-371.
3. Cherullo EE., *et al.* "Laparoscopic management of congenital seminal vesicle cysts associated with ipsilateral renal agenesis". *The Journal of Urology* 167 (2002): 1263-1267.
4. Dahms SE., *et al.* "Retrovesical mass in men: pitfalls of differential diagnosis". *The Journal of Urology* 161 (1999): 1244-1248.
5. Evangelos NL., *et al.* "Congenital seminal vesicle cyst and coexisting renal agenesis: laparoscopic approach". *Urology* 63 (2004): 584.e12-584.e14.
6. Fatih A., *et al.* "Seminal vesicle cyst presenting as rectal obstruction". *Urology* 63 (2004): 584.e1-584.e2.
7. Ikari O., *et al.* "Laparoscopic excision of seminal vesicle cysts". *The Journal of Urology* 162 (1999): 498-499.
8. Karmouni T., *et al.* "Kyste de la vésicule séminale avec agénésie du rein homolatéral". *Progrès en Urologie* 12 (2002): 102-104.

**Volume 6 Issue 4 April 2023**

**©All rights reserved by Wael Ferjaoui., et al.**