# Mullerian duct cyst: a case history and literature review

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## INTRODUCTION

A mullerian duct cyst results from an abnormality of regression of the mullerian system (Yoshinori et al, 1999). The prostatic utricle is a homologue of the female uterus and is a caudal remnant of paramesonephric ducts (Morgan et al, 1979; Smith and Middleton, 1979).

Mullerian cysts usually present as small mid-line masses between rectum and bladder neck or prostate (Yoshinori et al, 1999). This article presents a case report.

## DISCUSSION

Symptoms of mullerian cysts appear in the third and fourth decades. Presenting symptoms may be constipation or urinary symptoms such as incontinence, urinary retention, haematuria or pyuria.

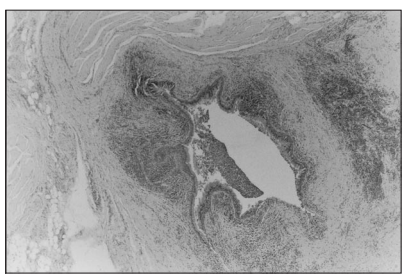
To qualify as a mullerian duct cyst, it should be a cyst lined by either cuboidal or columnar epithelium or both. It should be in the true pelvis, communicating with prostatic utricle and containing no spermatozoa. Cysts of ejaculation ducts or seminal vesicles contain spermatozoa. The communications to the utricle sometimes cannot be demonstrated and the lining epithelium may be destroyed by the pressure of fluid or infection. Congenital abnormalities of genitalia such as hypospadias are sometimes associated. The size of these cysts varies from less than 1 cm to large cysts filling the pelvis and containing up to 5 litres of fluid. The cyst wall usually consists of collagenous connective tissue and strands of smooth muscle with associated inflammation (Eichoff, 1978).

Computed tomography scans and retrograde urethrography are among the most useful investigative procedure (Yoshinori et al, 1999).

Magnetic resonance imaging is one of the most useful investigative techniques. The demonstration of prostatic zonal anatomy, the ability to obtain direct images in all three orthogonal planes and a large field of view make magnetic resonance imaging valuable in the study of suspected mullerian duct cysts (Thurnher et al, 1988).

Surgical excision is usually curative in most cases. This case of mullerian duct cysts presented in an unusual site in the peri-anal area, away from the midline. HM

*Figure 1. Low power view of a cyst wall lined by columnar epithelium and surrounded with a fibrous stroma. Magnification 4 x 10 at width of 15 cm.*



## CASE REPORT

A 52-year-old man presented with an 8-week history of a painless lump in his left ischeorectal region. He had no past medical history, no trauma and no bowel disturbance. On examination, a 2 cm subcutaneous discrete mass lesion was found at 3 o'clock in the lithotomy position. This was mobile and not attached to the sphincters. Ultrasound and computed tomography scans were performed of the area which showed a 2 cm irregular lesion of mixed echogenicity. The lesion was excised and was found to be a 2 x 3 cm partially encapsulated lesion extending into the pararectal space. Histology showed a cyst lined by ciliated columnar epithelium, with a fibrous wall and surrounded by heavy inflammatory response (*Figures 1–3*).

The patient made a complete recovery.

Eichoff JH (1978) Mullerian duct cyst. *Scand J Nephrol* **12:** 89–92

Morgan RJ, Williams DI, Pryor JP (1979) Mullerian duct remnants in the male. *Br J Urol* **51:** 488–92

Smith JA, Middleton RG (1979) Surgical approach to large mullerian duct cysts. *Urology* **14(1):** 44–6

Thurnher S, Hricak H, Tanagho EA (1988) Mullerian duct cyst: diagnosis with MRI. *Radiology* **168(1):** 25–8

Yoshinori N, Naoki Y, Satoshi I, Yoshito T, Takashi D, Yukimichi K (1999) Mullerian duct cyst extending into the abdomen. *Urology* **53(3):** 624–6

*Figure 2. Cyst lined by ciliated columnar epithelium with surrounding inflammatory response. Magnification 10 x 10 at width of 15 cm.*

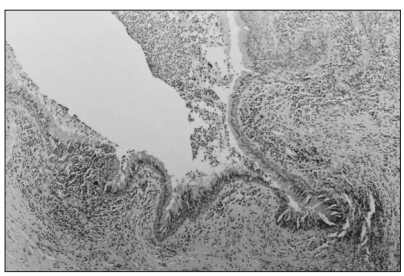
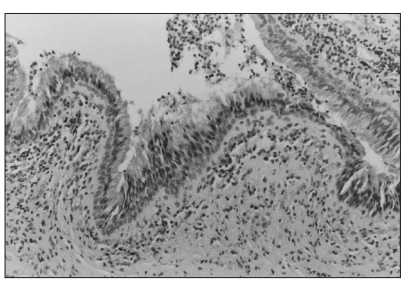


*Figure 3. Cyst lining composed of ciliated columnar epithelium and many inflammatory cells in the lumen as well as in fibrous cyst wall. Magnification 10 x 20 at width of 15 cm.*



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