

## Giant Ureterocele of the Adult: About a Case Report

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### Abstract

### Case Report

**Introduction:** Ureterocele, denotes a malformation characterized by dilatation pseudocystic of the terminal portion of the ureter. The advent antenatal ultrasound and the early management of this condition have made this entity increasingly rare in adults explaining the lack of publications about it. **Case report:** We report the case of 42-year-old woman, married for 12 years, who consulted for left lumbago, rebels to analgesic treatment. The patient has a history of recurrent cystitis; a left ureterocele was diagnosed, and treated by an endoscopic technique. **Discussion:** The ureterocele, described for the first time in the 17th century, is a rare congenital malformation, its precise embryologic etiology remains unknown, several theories have been proposed, and however the most accepted theory is the incomplete dissolution of the Chwalla membrane. Treatment, indicated in symptomatic or complicated forms, is not univocal. Resection of the ureterocele usually creates reflux that can potentiate urinary infection, and therefore, requires reimplantation, but still is the treatment of choice for symptomatic or complicated ureteroceles of the adult. It is a minimally invasive, easy, reproducible and effective technique. **Conclusion:** Ureteroceles represent a clinical challenge in term of diagnosis and management due to their various presentations and types.

**Keywords:** Ureterocele, adult, endoscopic meatotomy.

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## INTRODUCTION

Ureterocele, term used for the first time by STOCKEL in 1907, denotes a malformation characterized by pseudo cystic dilatation of the terminal portion of the ureter [1]. The advent antenatal ultrasound and the early management of this condition has made this entity increasingly rare in adults explaining the lack of publications about it.

Its treatment is not unequivocal; it is indicated in case of symptomatic or complicated ureterocele [2]. Ureteroceles may be intravesical (orthotopic) or extravesical (ectopic), we report a case of a huge left intravesical ureterocele in an adult woman with recurrent infections and hydronephrosis.

## CASE REPORT

We report the case of a 42-year-old woman, married for 12 years, who consulted for left lumbago, rebels to analgesic treatment. The patient has a history of recurrent cystitis treated on an outpatient basis without explorations.

The history of the disease had begun 4 years earlier, by the installation of left lumbago and

obstructive syndrome of the lower urinary tract, made of dysuria and pollakuria, without notion of hematuria, evolving in a context of apyrexia and conservation of the general condition.

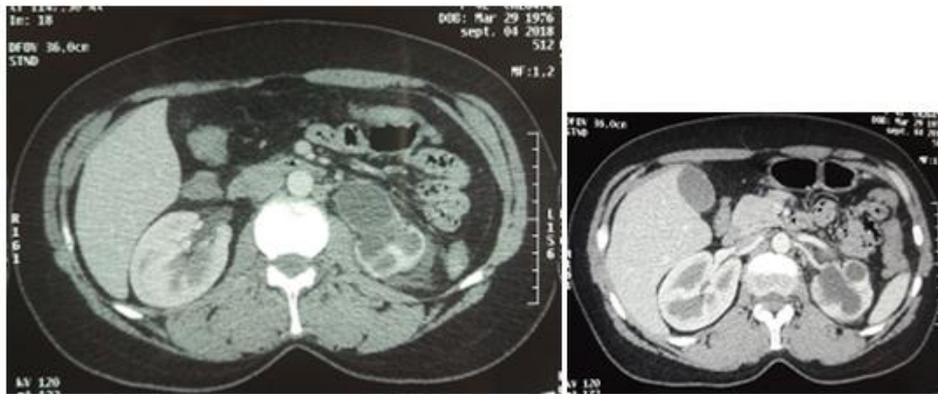
An abdominal ultrasound was performed initially, showing a left hydroureteronephrosis, computed tomography (CT) scan of the abdomen and pelvis shows a significant hydroureteronephrosis with pyelon measuring 27 mm, associated with infiltration of perirenal and ureteral fat (fig.1), And presence of a cyst appearance with intravesical liquid image continuing with the ureter at the ureteral meatus, measuring 42x51x43 mm, evoking a left ureterocele (fig.2).

Blood urea nitrogen, serum creatinine, and routine serum electrolytes were normal, urinalysis on admission showed few white blood cells and urinary tract infection, E.Coli was identified and treated adequately.

The patient was treated by an endoscopic technique: under rachi anesthesia, the patient was put in gynecologist position, a22F cystoscope was introduced into the bladder, a large left intravesical

ureterocele was seen, and then endoscopic méatotomie

was done. Follow-up MCU did not reveal any reflux.



**Fig-1: Computed tomography scan of the abdomen shows a significant hydronephrosis**



**Fig-2: A cyst appearance with intravesical liquid image continuing with the ureter at the ureteral meatus**

## DISCUSSION

The ureterocele, described for the first time in the 17th century, corresponds to a pseudocystic dilatation of the terminal portion of ureter. It is a rare congenital malformation; its incidence is 1:4000 individuals, four to six times more frequent in girls than boys [1].

It is an embryological developmental anomaly and while its precise embryologic etiology remains unknown, several theories have been proposed, however the most accepted mechanism is the incomplete dissolution of the Chwalla membrane which is a membrane between the urogenital sinus and the developing ureteral bud [3].

Ureteroceles have diverse presentations ranging from life-threatening sepsis, renal failure, and recurrent urinary tract infections (UTIs), to no symptoms at all being detected incidentally or by antenatal ultrasonography [4].

Large ureteroceles can frequently be associated with obstruction or reflux of the ipsilateral lower pole. We report here an uncommon complication of a huge ureterocele, causing recurrent urinary tract infection, and a significant hydronephrosis with dysuria, goes unnoticed until adulthood.

Treatment, indicated in complicated or symptomatic forms, is not univocal. Resection of the ureterocele usually creates reflux that can potentiate urinary infection, and therefore, requires reimplantation.

Bada and al, said that endoscopic decompression of ureterocele should be considered as first line treatment in young infants and children. Resection of the ureterocele sac or wide section of its wall should be avoided. Multiple punctures by laser energy are a really minimally invasive treatment that allows immediate decompression and reduce the risk of further aggressive surgery [5].

For derouiche and al, endoscopic meatotomy appears to be the treatment of choice for complicated ureteroceles or symptomatic of the adult. It is a minimally invasive, easy, reproducible and effective technique [6].

Ureteroceles can be effectively managed with endoscopic resection or incision of the ureterocele, however long term follows up is required to monitor for hydronephrosis and iatrogenic vesicoureteric reflux [7]. Our patient was treated by an endoscopic meatotomy and follow-up MCU did not reveal any reflux.

## CONCLUSION

Ureteroceles represent a clinical challenge in term of diagnosis and management due to their variable

presentations and types, endoscopic meatotomy is the treatment of choice and first intention to offer to adults with symptomatic or complicated ureterocele.

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