CASE REPORT

Ureterocele

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Abstract

Ureterocele, a rare condition, is a congenital saccular dilation of terminal portion of the ureter. Presented here is a case report of a patient who had complaints of recurrent urinary tract infection and right loin pain. The ultrasonography followed by intravenous pyelography proved it to be the case of ureterocele.

Key Words

Ureterocele, Cyst within cyst, Adder head appearance.

Introduction

A ureterocele is a congenital saccular dilatation of terminal portion of the ureter. It has varied effects in regard to obstruction, reflux, continence and renal function (1). The most common presentation is that of urinary tract infection or urosepsis in children. Stasis of urine can lead to calculus formation. Some children may present with palpable mass due to hydronephrotic kidney. Cyst may prolapse into internal urethral opening causing obstruction to bladder outflow (2). This condition may remain unrecognized until adult life. Ureterocele is usually discovered on radiological examination or during endoscopy.

Case Report

A twenty-five years old female patient was admitted with complaint of severe right loin pain with vomiting. There was history of recurrent urinary tract infection for last three years. General physical examination did not reveal any abnormality. Routine urinary examination showed plenty of pus cells.

Renal and urinary bladder ultrasonography revealed right moderate hydronephrosis with right hydroureter. Cyst within cyst or intravesical ureterocele was seen within urinary bladder (Fig 1).

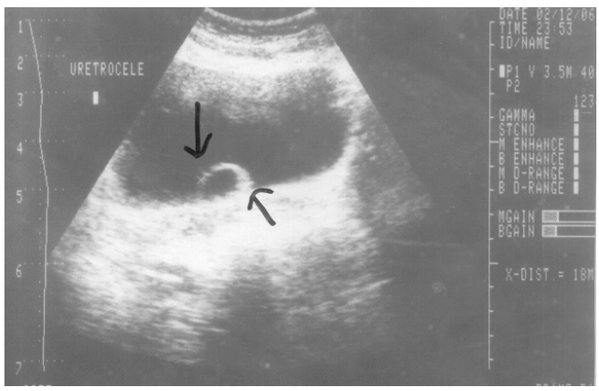

Fig 1. Ultrasonogram demonstrating right intravesical ureterocele (cyst within cyst)

On Intravenous Pyelography (IVP) classical **" Adder Head Appearance"** at right ureterovesical junction was observed (Fig 2). Right pelvicalyceal system and right ureter were dilated. Left pelvicalyceal system and left ureter were visualized normally. Patient was referred to urosurgeon for further management, but the patient refused the treatment.

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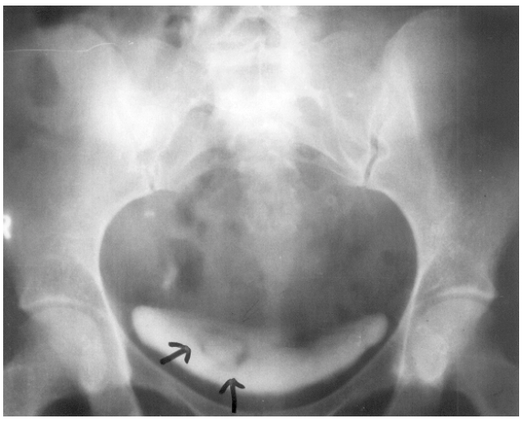

Fig 2. IVP showing the clssical "Adder Head Apperance" at the right ureterovesical junction

Discussion

The commonly accepted theory behind ureterocele formation is the obstruction of ureteral orifice during embryogenesis, with incomplete dissolution of chwalla membrane (1). Ureteroceles have a particular predilection for race and gender. They occur most frequently in females (4:1) and commonly in the Caucasians. Approximately 10% of ureteroceles are bilateral. Eighty percent of all ureteroceles arise from the upper pole of duplicated system (2). Single system ureterocele is known as simple ureterocele and is usually found in adults. This single system ureterocele is less prone to the severe obstruction and dysplasia associated with duplicated system. Ectopic ureteroceles refers to those ureterocele, whose orifices are located in ectopic location such as bladder neck or urethra and are common in pediatric population (3). Ureterocele may manifest as a failure to thrive or as abdominal or pelvic pain. Ureterocele may evert into the ureter and appear to be a diverticulum (4). The imaging studies provide a great deal of insight into effects of ureterocele on normal anatomy and physiology. Renal and bladder sonography is first-line imaging study. Ureterocele is seen as a fluid filled intravesical mass. Hydroureteronephrosis is observed as dilatation of renal pelvis and ureter. IVP is useful for delineating anatomy and renal function. As ureteroceles have a broad spectrum of presentation, anatomy and pathophysiology, thus management can not be generalised (5). No single method suffices for all the cases. Single system ureteroceles more readily lend themselves to transvesical excision and reimplantation, with any muscular defect corrected as necessary. These are also amenable to endoscopic excision.

References

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