

## Medical Quiz Answers

1. Dilatation of the distal left ureter and upper moiety of the left kidney.
2. Left ureterocele.
3. Cystoscopy and puncture of the left ureterocele.

### DISCUSSION

A ureterocele is a congenital cystic dilatation of the terminal part of the ureter most commonly found in young females. The incidence of ureteroceles is about 1 in 1,000 live births. Ureterocele is six times more frequent in females than in males. Ureterocele is usually associated with a double collecting system in 80% of cases<sup>1</sup>.

Ureterocele is classified into intravesical (completely within the urinary bladder) or ectopic (at the bladder neck or in the urethra)<sup>1,2</sup>.

The most common presentation of patients with ureterocele is urinary tract infection, reported in 87.5% of symptomatic cases. Less common presentations are obstructive urinary symptoms and incontinence. Hematuria, abdominal pain and abdominal mass are rare clinical presentations of patients with ureterocele<sup>1,2</sup>.

The diagnosis of ureterocele in children can be achieved by high index of suspicion and abdominal ultrasonography. A micturating cystourethrogram (MCUG) is an essential test to evaluate vesicoureteral reflux in patients with ureterocele. Renal function in cases of ureterocele and dilated upper tract is evaluated by 99m-technetium dimercapto-succinic acid (DMSA) renal scan<sup>3</sup>.

The aim of ureterocele management is to preserve renal function and to prevent urinary bladder outlet obstruction. The surgical options range from puncturing the ureterocele to nephrectomy. The choice of treatment is based on the age of the patient, type of ureterocele, presentation, renal function and presence of vesicoureteral reflux. The endoscopic management is suitable for intravesical ureterocele whereas reconstructive surgery is recommended for ectopic ureterocele with preserved renal function. Partial nephrectomy is indicated in cases of ureterocele with loss of renal moiety function<sup>4-7</sup>.

### CONCLUSION

**A ureterocele is congenital cystic dilatation of terminal ureter. Clinical presentation varies from asymptomatic to severe urosepsis. Diagnosis is based on ultrasound, micturating cystourethrogram and renal isotope scan.**

**Management of ureterocele depends on the presence of obstruction, location of ureterocele and vesicoureteral reflux. Endoscopic treatment of ureterocele is effective in relieving the obstruction in most cases. Partial nephrectomy is required in selected cases of non-functioning renal moiety.**

**Potential Conflicts of Interest:** None.

**Competing Interest:** None.

**Sponsorship:** None.

**Acceptance Date:** 27 April 2018.

**Ethical Approval:** Approved by the Department of Pediatric Surgery, Salmaniya Medical Complex, Bahrain.

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