Unilateral Ectopic Ureter in a Continent Woman Presenting with Intermittent Hydronephrosis and Repeated Urinary Tract Infection

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ABSTRACT

Approximately half of women with ectopic ureters present with a classic history of continuous dribbling incontinence despite what appears to be a normal voiding pattern. An ectopic ureter may also be severely obstructed, causing massive hydronephrosis as an abdominal mass. We present a continent 66 year-old woman with a unilateral ectopic ureter at the bladder neck presenting as repeated urinary tract infection and intermittent hydronephrosis. Her hydronephrosis improved spontaneously without any treatment.

keywords: ectopic ureter, hydronephrosis, urinary tract infection



Fig. 1. Intravenous urography shows right hydronephrosis (arrow) and a hydroureter without a definite obstruction level.

TEXT

A 66-year-old woman presented with fever and cramping right flank pain for 3 days. She had repeated urinary tract infections and intermittent right flank soreness for several years. Laboratory tests showed normal renal function and numerous white and red blood cells in the urine. A urine culture showed *E. coli*. A plain radiograph of the abdomen disclosed no radiopaque lesions, but right hydronephrosis was seen on renal sonography. Intravenous urography showed a dilated right renal pelvis and ureter without a definite obstruction level (Fig. 1). Cystoscopy showed an ectopic right ureteral orifice at the bladder neck (Fig. 2, arrow). There was no ureteral stricture or obstruction, and her hydronephrosis improved spontaneously without any treatment. Uroflowmetry and postvoid residual urine were not checked in this patient. However, no significant residual urine was found on an intravenous pyelogram. Computed tomography showed an ectopic ureteral orifice at the bladder neck without hydronephrosis (Fig. 3).

The urethra and vestibule are the most common sites of termination of an ectopic ureter in women [1]. Approximately half of female



Fig. 2. Cystoscopy shows an ectopic right ureteral orifice at the bladder neck (arrow).

Clinical pearls — Genitourinary tract image

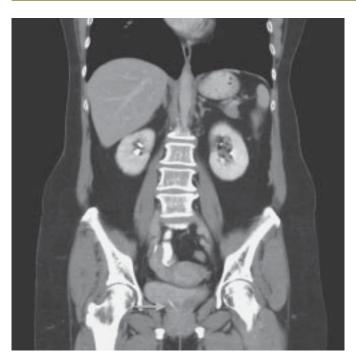


Fig. 3. Reconstructed contrast-enhancing computed tomography in the excretory phase shows contrast through the right ureter directly passing to the bladder neck.

patients with ectopic ureters present with a classic history of continuous dribbling incontinence despite what appears to be a normal voiding pattern [2]. An ectopic ureter may also be severely obstructed, causing massive hydronephrosis as an abdominal mass [3]. We presented a continent woman with a unilateral ectopic ureter at the bladder neck presenting as repeated urinary tract infections and intermittent hydronephrosis. The reason for her intermittent hydronephrosis may have been edema over the ureteral orifice during inflammation, but we had no evidence of this. Although an ultrasound revealed no hydronephrosis, mild hydronephrosis has been found without evidence of urinary tract infection.

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