

Lifetime incontinence due to ectopic ureter with hypoplastic dysplastic kidney in 22 yr old lady, a Case Report

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Abstract

Continuous urine dribbling together with normal micturition is the classical picture of ectopic ureter in girls. We present our case which 22yr old lady presented to our department with life time incontinence. The diagnostic work-up included: Excretory Urography, ultrasonography (US), cystogram, MRI and Cystoscopy, as well as a thorough exam of the external genitalia under general anesthesia. Our case presented an ectopic ureter that ends the vagina with single dysplastic renal system and nephrectomy with ureterectomy was done as treatment of choice.

Urinary incontinence in girls due to ectopic ureter is an uncommon disease. Eighty-five% of the cases are associated to renal duplication. IVU is highly sensible to defect renal duplication; and only 15% of ectopic ureters come with single system.

Keywords: incontinence, ectopic ureter, duplex renal system

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Introduction

Girls with no other signs or symptoms but continuous dribbling of urine, despite successful toilet training, should be considered to have a ureter with an extravesical, infrasphincteric orifice. Usually, the ureter with an ectopic orifice drains the upper moiety of a double collecting system or less commonly it drains a single hypoplastic and dysplastic kidney. Excretory urography is helpful for confirmation, and it is usually diagnostic of both the condition and the affected side or sides. CT Urography and MRI are additional diagnostic tests to verify the problem.

Cystourethroscopy is helpful to locate the site of the ureteric orifice

The case

A 22 years old lady presented with life time continuous incontinence with normal urination pattern, general examination was normal, urinalysis

revealed few pus cells, biochemistry was normal, the history and the other findings were highly suggestive of ectopic ureter.

Excretory urography was done to her that showed non visualization of the Lt. Kidney, with normal functioning Rt. kidney, MRI showed non visualization of the Lt. Kidney in its normal position, and showed a fluid filled cyst near Lt. Lateral wall of the urinary bladder.

Cystourethroscopy was done and showed normal Rt. Ureteric orifice but the Lt. ureteric orifice was not visualized and there was spillage of urine through the vagina.

According to the above findings, exploration through modified Lt. Gibson incision and a dilated and tortuous ureter was found that ends in the posterior wall of the vagina draining a dysplastic and hypoplastic kidney situated at the pelvis. Nephrectomy with ureterectomy was done. Figures (1, 2)

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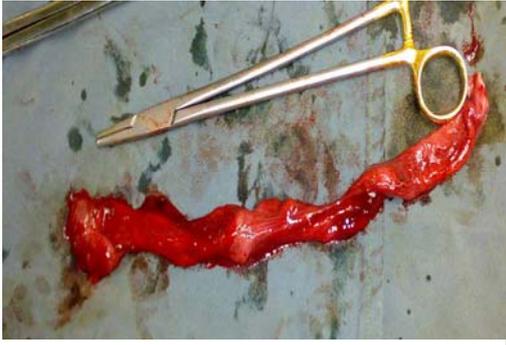


Figure 1: the dysplastic kidney with the ectopic ureter



Figure 2

Discussion:

Wetting is an exceedingly common pediatric complaint, and most children with urinary incontinence have no underlying structural abnormality. Their physical examination is normal, and their wetting is usually nocturnal. It is apparently due to immaturity of bladder and urethral sphincter function, is commonly hereditary, and is typically outgrown^(1,2). Imaging is not recommended.

Anatomic abnormalities causing incontinence of urine include spinal dysraphism, sacral agenesis, and epispadias⁽³⁾

Such conditions are usually evident on careful physical examination of the back, perineum, and lower extremities. Plain films may show spinal anomalies or, in epispadias, an abnormal (>10 mm) interpubic distance.

In girls who are otherwise well and whose history is that of continuous wetting, day and night, despite successful toilet training, for as long as anyone can remember, an extravasical infrasphincteric ectopic ureteral orifice should be strongly suspected and imaging should be vigorously pursued. Ureteral ectopia with incontinence is uniquely female related, because the most caudal location for an ectopic Ureteral orifice in a male is always above the urethral sphincter.

Ectopia of the ureteral orifice is often associated with dysplasia of the kidney on that portion of the kidney drained by the ectopic ureter. As a rule, the more ectopic the orifice the worse will be the dysplasia⁽⁴⁾.

Grande Moreillo et al described⁽⁵⁾ their eleven girls with the classical picture of ectopic ureter in girls with continuous urine dripping together with normal micturition. Ten girls had a double renal system, one of them being bilateral; one girl had single kidneys with renal ectopia. Treatment was heminephrectomy with ureterectomy in 9 cases, ureteroureterostomy with preservation of the hemikidney in one case, and nephrectomy with ureterectomy in the case with a simple system⁽⁵⁾.

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