

Prolapsed Vaginal Ureterocele as a Cause of Urinary Incontinence in a Child

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A 5-year-old child was referred to our department with a clinical history of urinary incontinence, dysuria and urinary tract infections. Physical examination (abdomen and genitalia) was unremarkable. Abdominal ultrasonography revealed the presence of a left duplicated system (**Figure 1A**) with normal bladder (**Figure 1B**). Antenatal history was unremarkable. Magnetic resonance imaging of the abdomen and pelvis was performed in order to clarify the anatomy of the duplicated system (**Figure 2**). Voiding cystourethrography showed no vesicoureteral reflux (**Figure 3**) while renal scan showed a poor function of the upper pole. As the patient was complaining of urinary leakage and dysuria, transvaginal voiding vaginoscopy/urethroscopy was performed. Vaginoscopy demonstrated the presence of a cystic mass on the left-anterior vaginal wall (**Figure 4**). A 3 French ureteral catheter was inserted and an un-roofing of the ureterocele was performed, followed by a left hemi-nephroureterectomy of the upper pole because of its poor function.

In most of reported cases, an interlabial mass is usually evident,⁽¹⁾ conversely, in our case, physical examination was normal and a correct assessment of the anatomical defect was obtained only with endoscopic investigation. Approximately 80% of ectopic ureterocele are associated with the upper pole moiety of a duplex system leading often to urinary retention. Conversely, in this case, urinary incontinence was present.^(2,3) For this reason, a vaginal prolapsed ectopic ureterocele, despite its rarity, would be considered, as a cause of urinary leakage in a child, especially when radiological imaging is not confirmative. In this situation performing cystoscopy/vaginoscopy is essential in order to make accurate diagnosis.

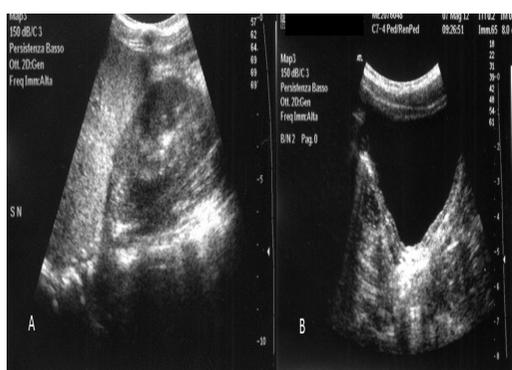


Figure 1. (A) Ultrasound showing left kidney; (B) Ultrasound picture of the bladder.

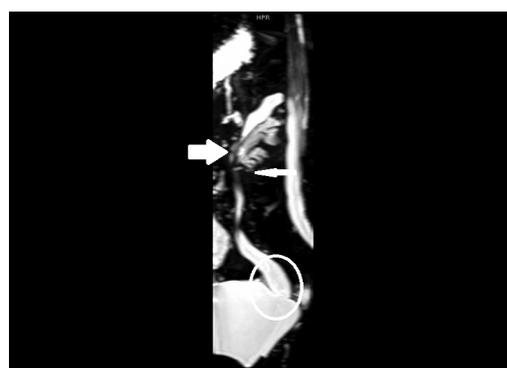


Figure 2. Magnetic resonance imaging demonstrates the presence of a left duplicated collecting system (upper pole, bold arrow; lower pole, narrowed arrow; white circle, presumptive insertion of the duplicated system into the bladder without evidence of the ectopic prolapsed ureterocele).

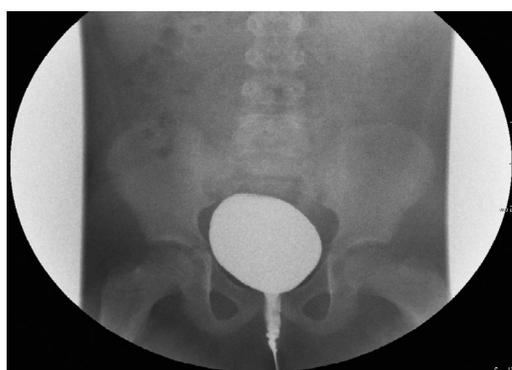


Figure 3. Voiding cystourethrography.

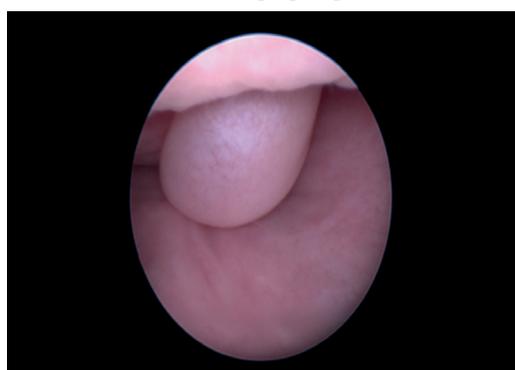


Figure 4. Vaginoscopy showing the ectopic prolapsed vaginal ureterocele.

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