BLIND-ENDING URETERIC DUPLICATION – A RARE DEVELOPMENTAL ANOMALY OF THE URETER

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A 10-year-old girl with recurrent urinary tract infections (UTI) and urinary incontinence was admitted to our institution. Ultrasound showed a normal left and smaller right kidney, with mild dilatation of the pyelon and calices, and two dilated ureters on the right of the bladder. Voiding urosonography (VUS) excluded vesico-ureteral reflux. Urodynamics was normal. Magnetic resonance urography (MRU) demonstrated a bifid right ureter (Y ureter), with a tortuous, dilated (17 mm) blind-ending branch rising from the distal third of the functional ureter (Panel A). Also, MRU showing the ectopic ureteral orifice of the left ureter entering the bladder neck (Panel B). One of the theories proposed to explain the embryological origin of a blind-ending bifid ureter is the fission of the ureteral bud with failure of one of the branches to make contact with the metanephric mesenchyma. It may be asymptomatic or cause UTI hematuria, flank or abdominal pain and lithiasis. Our case confirmed that MRU has an important role in diagnosing children with congenital urinary tract anomalies, especially when other diagnostic procedures (US, VUS, urodynamics) cannot find the cause of complaints. The main advantage of MRU is that it shows precise anatomical details, especially in poor or afunctional renal moieties, not using ionizing radiation. The ectopic left ureter opening in the bladder neck is the cause of urinary incontinence and could be participating in the patient’s recurrent UTIs along with the blind-ending ureter. Our surgical plan is to remove the blind ending ureteral branch and re-implant the left ectopic ureter.
**Key words:** Anomaly of the ureter, Magnetic resonance urography, Children.

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