

Unilateral Blind Ending Ureter with Vesicoureteral Reflux and Associated Renal Agenesis -Multidetector Computed Tomography Imaging Findings

Nada G. Vasić,^{1*} Olivera Nikolić,² Tatjana Bošković³

A 50-year old woman was admitted to emergency room due to an episode of recurrent renal colic. Double-J ureteral stent has been placed several weeks earlier due to mild hydronephrosis of the left kidney. She had a history of urinary tract infections and poorly defined abdominal pain.

Abdominal computed tomography (CT) scan revealed normal left kidney and normal left urinary tract without calculi, presence of double-J ureteral stent and absent right kidney (**Figure 1 - Coronal multiplanar reformatted image**). Excretory phase of CT scan showed retrograde opacification of distal, blind-ending, nondilated, nonobstructed right ureteral stump. Visualized structures suggested remnant of the incompletely developed right ureteral bud, with normal position of the right ureteral orifice (**Figure 2A, Coronal curved-planar reformatted and**



Figure 1. Abdominal computed tomography scan (Coronal multiplanar reformatted image) shows normal left kidney and normal left urinary tract without calculi, presence of double-J ureteral stent and absent right kidney.

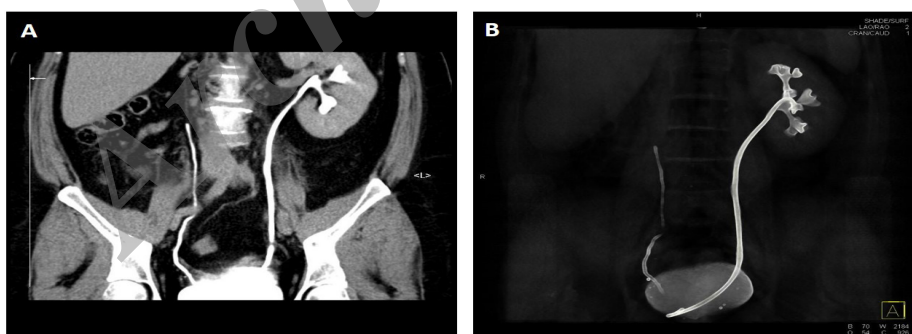


Figure 2. Excretory phase of computed tomography scan demonstrates retrograde opacification of distal, blind-ending, nondilated, nonobstructed right ureteral stump. Visualized structures suggested remnant of the incompletely developed right ureteral bud, with normal position of the right ureteral orifice. **A)** Coronal curved-planar reformatted; **B)** Volume-rendered image.

¹ Department of Radiology, Primary Health Care Center "Novi Sad", Novi Sad 21000, Serbia.

² Center of Radiology, Clinical Center of Vojvodina, Novi Sad 21000, Serbia.

³ Center for Radiology, Institute for Pulmonary Diseases of Vojvodina, Sremska Kamenica 21208, Serbia.

*Correspondence: Department of Radiology, Primary Health Care Center "Novi Sad", Novi Sad 21000, Serbia.

Tel: +38 163 523767. E-mail: grujicnada@yahoo.com.

Received July 2015 & Accepted February 2016

Figure 2B, Volume-rendered image).

Most blind-ending ureters are detected incidentally and are clinically insignificant.⁽¹⁾ In some cases, though, they may induce recurrent urinary tract infections, renal colic or poorly defined abdominal pain due to present-ed vesicoureteral reflux.⁽²⁾ Presence of calculi in blind ending urethral bud has been described with the patient having overactive bladder syndrome and dyspareunia.⁽³⁾

CONFLICT OF INTEREST

None declared.

REFERENCES

1. Floyd MS Jr, Scally J, Irwin PP. Incidental detection of a unilateral dilated blind-ending ureter, renal agenesis, and a dilated seminal vesicle. *Urol J*. 2012;9:639.
2. Rathi V. A blind-ending ureter with infection due to vesicoureteric reflux with associated renal agenesis: A rare cause of pain abdomen. *Urol Ann*. 2011;3:100-2.
3. Wiedemann A, Kociszewski J, Gumprich T, Füsgen I. Calculi in a blindly ending ureteric bud - an unusual cause for an overactive bladder syndrome and dyspareunia. *Aktuel Urol*. 2011;42:193-6.