



Spontaneous Rupture of Renal Pelvis Due to Bladder Globe

Renal Pelvisin Mesane Globuna Bağlı Spontan Rüptürü

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A 55-year-old man presented to the emergency clinic due to difficult urination and confusion. A suprapubic mass was palpated during examination. Urea (452 mg/dL) and creatinine (21.3 mg/dL) levels were elevated. Non-contrast enhanced computed tomography (CT) scan revealed bilateral hydronephrosis and dilated ureters. Within a few hours after a Foley catheter insertion,

4,500 mL of urine was drained. At the 24th hour of admission, the postrenal acute kidney injury improved rapidly with serum creatinine and urea levels declining to 1 mg/dL and 58 mg/dL, respectively. On CT-urography, free passage of contrast media from the pelvis renalis to around the left kidney was detected. It is interpreted as rupture of the renal pelvis (Figure1 A and B).

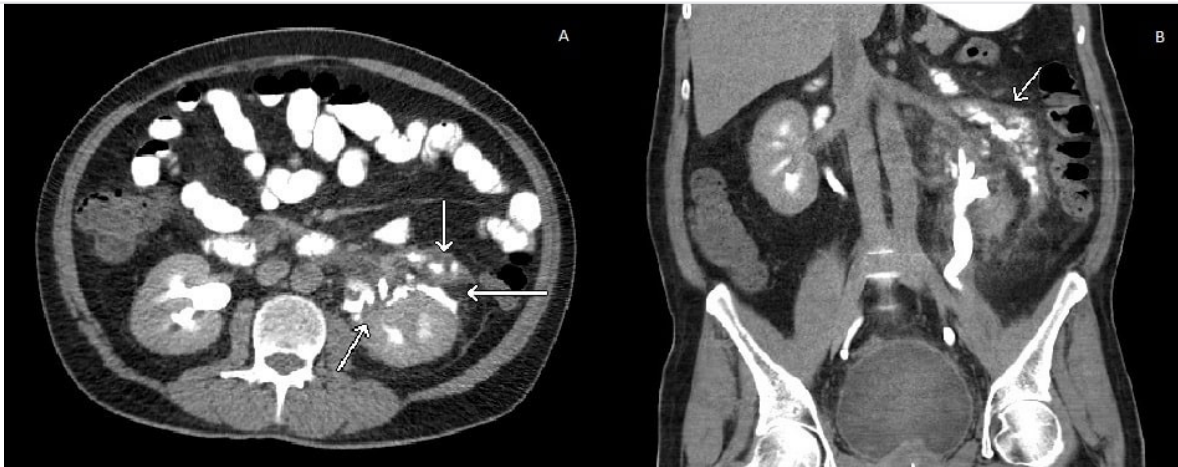


Figure 1. Free fluid around the kidney seen at CT-urography scan on coronal and axial views

CT: Computed tomography

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Spontaneous rupture of the renal pelvis is a rare condition, usually caused by ureteral calculi, ureteral instrumentation, tumors, and trauma (1-3). In this patient, the cause was assumed to be a bladder globe, thus, a double J-stent was inserted into the left ureter. The urodynamic examination revealed a hyposensitive and hypocompliant bladder with normal capacity. Prostate volume was 38 mL. The patient performed intermittent urinary self-catheterization and has a stable serum creatinine value.

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References

1. Zhang H, Zhuang G, Sun D, Deng T, Zhang J. Spontaneous rupture of the renal pelvis caused by upper urinary tract obstruction: A case report and review of the literature. *Medicine (Baltimore)* 2017;96:9190.
2. Janardanan S, Kulkarni R, Arumainayagam N. Simultaneous Rupture of the Bladder and Pelvicaliceal System Because of Blunt Abdominal Trauma: A Rare Case. *J Endourol Case Rep* 2019;5:42-4.
3. Gulati A, Prakash M, Bhatia A, Mavuduru R, Khandelwal N. Spontaneous rupture of renal pelvis. *Am J Emerg Med* 2013;31:762.