

Total Urinary Tract Obstruction : An Unusual Complication of Parapelvic Cyst Associated with Solitary Kidney

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Soliter Böbrekli Hastada Parapelvik Kist Nedeniyle Gelişen Komple Üst Üriner Sistem Obstrüksiyonu

Özet

Böbrekte parapelvik kistler sık olarak rastlanılan benign lezyonlardandır. Kistlerin pelvise bası yaparak komplet obstrüksiyona neden olmaları nadir görülen komplikasyonlarından. Bu makalede soliter böbrekli 58 yaşındaki bir hastada parapelvik kist nedeni ile gelişen komplet üst üriner sistem obstrüksiyonuna bağlı olarak ortaya çıkan akut böbrek yetmezlikli bir hasta takdim edilmekte ve literatür eşliğinde tartışılmaktadır.

Anahtar Kelimeler: Parapelvik kist, Üriner obstrüksiyon, Soliter böbrek

Case report

A 58-year-old man was admitted with a 1-day history of anuria. His past medical history included left nephrectomy, retropubic prostatectomy and simple renal cyst in the right kidney. The physical examination was showed no bladder distension. The blood urine nitrogen level was 32 mg/dl and the serum creatinine level was 4.7 mg /dl. Ultrasonography revealed a 15x10 cm right parapelvic cyst compressing renal pelvis and hydronephrosis (Fig.1). Ultrasonography-guided percutaneous nephrostomy catheter was placed into the cyst and 750 ml clear fluid was drained. The cytological examination of the fluid was

unremarkable. A volume of 100 ml of 95% ethanol was injected into the emptied cyst as a sclerosing agent and drained after 30 minutes. The nephrostomy tube was removed following drainage and a double-J stent was placed into right ureter and pelvis. The urine output was 2500 cc 1 day after the procedure. The blood urine nitrogen and the serum creatinine levels returned to the normal range 3 days later. The patient was discharged without any complication 4 days later. Three weeks later the patient re-admitted for removal of stent and control ultrasonography. The ultrasonography showed no evidence of recurrence or hydronephrosis.

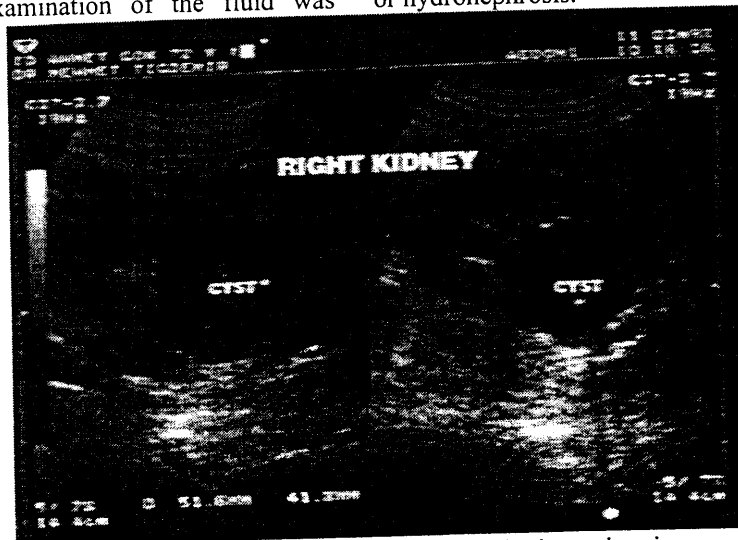


Fig.1. Ultrasonography showing cyst and hydronephrosis.

Benign parapelvic solitary cysts are a common finding on radiology studies. Rarely a parapelvic cyst may enlarge enough to obstruct the renal pelvis (1). Two requirements must be met for a cyst to obstruct: i) it must lie at or near the hilus and ii) it must have turgor sufficient to overcome the pressure of the intrapelvic urine (2). Renal function tests are normal unless the cysts are multiple and bilateral (3). Complete urinary tract obstruction is a very rare complication of parapelvic cyst. Although parapelvic cysts increase slowly and impairment of renal function does not occur, a large amount of cystic fluid may cause complete obstruction and lead to suppression of renal function. With a solitary kidney, this can produce acute renal failure. In the present case, after removing the cyst fluid, the patient recovered completely. The standard therapy of a parapelvic cyst is percutaneous drainage under either fluoroscopic or sonographic control. A volume of 10-100 mL of 95% ethanol approximating 10-20% of the original volume of cystic fluid, is injected into the cyst and should be drained after 30 minutes. The injection of 95% ethanol into an emptied cyst prevents the recurrence. If simple aspiration alone is utilized, most cysts will refill

References

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