NADİR BİR OLGU; RENAL APLAZİ İLE BİRLİKTE EKTOPİK ÜRETEROSEL VE MEGAÜRETER

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A RARE CASE; CONCOMITANT ECTOPIC URETEROCELE AND MEGAURETER WITH RENAL APLASIA

ÖZET

Doğuştan böbrek ve idrar yolu anomalilerinin insidansının 1000 doğumda 4 olduğu ve konjenital hidronefrozun en sık idrar yolu anomalisi olduğu literatürde bildirilmiştir. Bu çalışmanın amacı çok nadir görülen bir üriner sistem anomalisini BT ve US bulguları ile sunmaktır. 28 yaşında erkek hasta sol hipokondriyal ağrı ve yüksek ateş şikayeti ile acil servise başvurdu. Klinik muayene ile üriner sistem enfeksiyonu tanısı konuldu. Ultrason muayenesinde sol böbrek görülmedi. Bilgisayarlı tomografi çekildi ve mesaneye bağlı megaüreter ve üreter distalinde ektopik üreterosel saptandı.

Anahtar kelimeler: Ektopik Üreterosel, Megaüreter, Renal Aplazi, Ultrason

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ABSTRACT

It was reported in literature that incidence of the congenital kidney and urinary tract anomalies is 4 in 1000 birth and the congenital hydronephrosis is most frequent urinary tract anomaly. The aim of this study is to present a very rare urinary system anomaly with findings of CT and US. A 28 years old man was admitted to emergency room with left hypochondrial pain and high fever. A diagnosis of urinary system infection was made by clinical examinations. The left kidney was not seen in ultrasound examination. Computed tomog¬-raphy was performed and megaureter associated with bladder and ectopic ureterocele at the distal part of ureter were determined.

Keywords: *Ectopic Ureterocele, Megaureter, Renal Aplasia, Utrasound*

INTRODUCTION

It was reported that genitourinary system anomalies were 20-30% of all congenital anomalies and mostly sporadic (2). Unilateral renal agenesis and aplasia can be asymptomatic depending on contralateral hypertrophy, and incidentally diagnosed. By the widespread use of prenatal ultrasound, the chance of early diagnosis and treatment of urinary system anomalies is increasing. Renal aplasia with concomitant ectopic ureterocele and megaureter is very rare and, in our knowledge, a limited number of cases have been reported in the literature.

CASE

A 28 years old man was admitted to emergency room with left hypochondrial pain and fever. His serum white blood cell level was 16400/mm^3 and C-reactive protein was 328 mg/L.

Leukocytes were "+++" in urine and there was no growth in urine culture. Physical examination revealed tenderness on the left side. There was no remarkable history, especially urinary system infection or surgical treatment, in the patient's medical history. Right kidney dimensions, parenchyma, pelvis and calyces were normal in the ultrasound examinations. Left kidney was absent. Megaureter associated with bladder and concomitant ectopic ureterocele were determined in the left lower quadrant (Fig 1).

It was determined that proximal part of the megaureter was ended blinded and there was no kidney parenchyma by the contrast enhanced computerized tomography (Fig 2). No reflux was seen in voiding cystourethrography. Right ureter was seen at the normal localization in the cystoscopy assessment under the anesthesia. There were no other abnormal findings. The laparoscopic ureterectomy was performed (Fig 3). No complications were seen in the post-surgical follow-ups.

DISCUSSION

Ureterocele is a congenital anomaly and characterized by hyperplastic response to occlusion of the meatus. Despite incidence of ureterocele varies in the literature, it is approximately 1 in 500 and higher in women 4 to 7 times.

Studies reported that ureterocele was seen in ureter, which is usually draining upper pole of the kidney in the duplicated collecting system (95%) (4,5). Togetherness of the ureterocele and ectopic ureter are very frequent and megaureter risk increases when it is ectopic. Renal dysplasia and renal aplasia have been reported in megaureter cases that may occur due to various obstructive and non-obstructive reasons. In animal studies conducted by Peter et al., it was reported that the urinary obstruction caused renal aplasia or renal dysplasia according to the level of obstruction in the prenatal period (6).

The patient, who had no complaints until the age of 28 years, had ureter which is ended with ureterocele and enters the bladder from inferior side by ectopically. It was thought that megaureter and renal aplasia were associated with ureterocele.

CONCLUSION

Proper urinary tract imaging will be helpful in revealing the underlying urinary tract anomalies in the recurrent urinary tract infections and similar complaints. It is important that having sufficient knowledge of embryology as well as clinical experience in patient management.

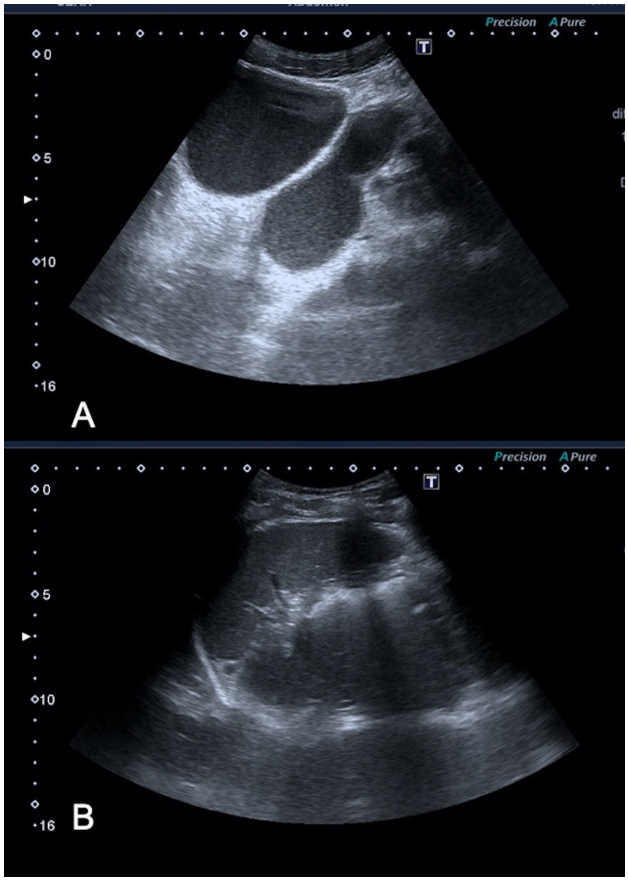

Figure 1: Ultrasound of the patient

A) Megaureter associated with bladder and concomitant ectopic ureterocele were seen in the left lower quadrant. B) No left kidney was seen in the left upper quadrant.

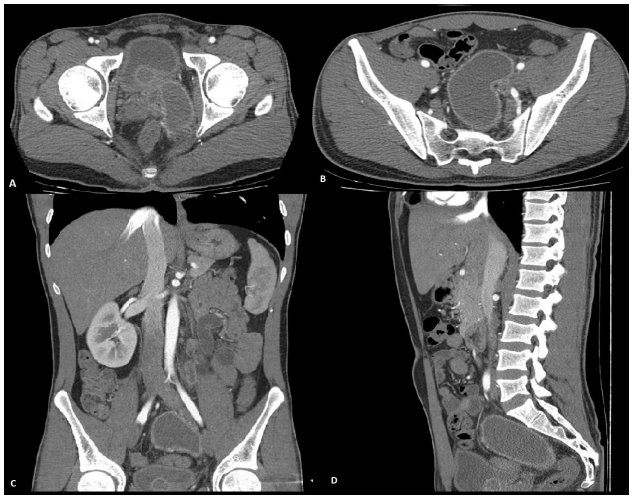

Figure2: Contrast enhanced computed tomography of the patient

A) Ectopic ureterocele and B) megaureter were seen in axial plane. C) Megaureter and ectopic ureterocele in the left lower quadrant were seen in the coronal plane. Also, no left kidney was seen at the same time. D) Sagittal plane of the same patient.

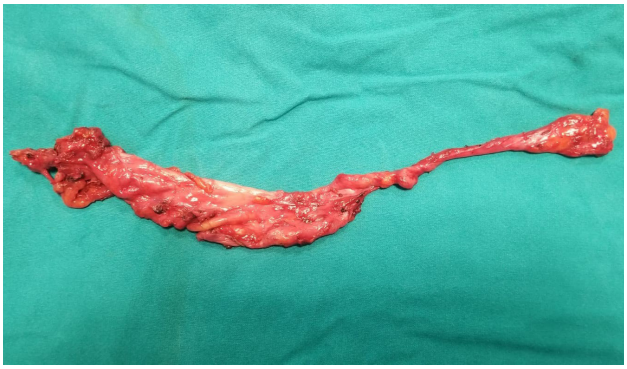

Figure 3: Specimen of the megaureter and ectopic ureterocele after the surgery.

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