

# Do we omit the Vesicoureteral Reflux as an Etiologic Cause in Adult Chronic Failure Patients?

Erdem Çankaya<sup>1</sup>, Yusuf Bilen<sup>2</sup>, Abdullah Uyanık<sup>1</sup>, Mustafa Keleş<sup>3</sup>,

Nurhan Bilen<sup>2</sup>, Leyla Karaca<sup>4</sup>, Fatih Albayrak<sup>2</sup>

<sup>1</sup>Atatürk University, Medical Faculty, Department of Nephrology, Erzurum, Turkey

<sup>2</sup>Atatürk University, Medical Faculty, Department of Internal Medicine, Erzurum, Turkey

<sup>3</sup>Mevlana University, Medical Faculty, Department of Nephrology, Konya, Turkey

<sup>4</sup>Atatürk University, Medical Faculty, Department of Radiology, Erzurum, Turkey



**Aim:** Vesicoureteral reflux (VUR) is an important disease which can cause chronic renal failure (CRF). According to various publications its prevalence is reported as 17 % in pediatric patient population. We have limited information for VUR in adult population. Infact there is no data about prevalence of VUR in adult population. Although VUR can be presented with recurrent lower and /or upper urinary tract infections it can be asymptomatic which may lead to late or miss diagnosis. In order to investigate VUR prevalence in adult patients with CRF we retrospectively investigated retrograde pyelography results of CRF patients with unknown etiological cause.

**Materials and Methods:** In this study we retrospectively investigated patients with CRF who added to transplantation waiting list for cadaveric kidney between 2004 and 2014. Patients with kinds of disease that may lead to secondary VUR such as neurogenic bladder and the patients that already diagnosed with VUR in childhood were excluded from the study. We included 237 CRF patients with unknown etiological cause who admitted for cadaveric graft waiting list and had evaluated with retrograde pyelography during etiologic evaluation before possible kidney transplantation decision.

**Results:** 91 (38.6 %) of the patients were female and 146 (61.4 %) were male. 51 (21.5 %) of the patients were on peritoneal dialysis and 143 (69.2 %) were on hemodialysis and 22 (9.3 %) of the patients were preemptively transplanted patients. Average age of the patients without VUR was  $45.54 \pm 16.69$  and the average age of the patients with VUR was  $49.21 \pm 18.33$  ( $p=0.24$ ). We detected that 33 (13.9 %) of the patients had any grade of VUR. It was detected that 8 (3.22 %) of the patients had right sided VUR, 10 (4.23 %) of the patients had left sided VUR and 15 (6.4 %) of the patients had bilateral VUR.

**Conclusion:** The exact prevalence of VUR in adults is not known. Although it is diagnosed in childhood diagnosis may be postponed in asymptomatic patients till the late adulthood. It is known that VUR negatively affect the graft survival in transplanted CRF patients. In this study we detected a substantially high rate of VUR in CRF patients. It is sensible to investigate VUR in CRF patients without known etiology during the transplantation work-up.

**Key word:** Vesicourethral reflux, Chronic renal failure, Renal transplantation