

비정상 소변검사를 보인 무증상의 신장 공여 예정자에서 시행한 신장조직 검사 소견과 이식신의 경과

가톨릭대학교 의과대학 내과학교실 신장내과¹, 외과학교실²

최선령¹, 박훈석¹, 선인오¹, 김현경¹, 홍유아¹, 정병하¹
김지일², 문인성², 최범순¹, 박철휘¹, 김용수¹, 양철우¹

Prospective Kidney Donors with Urinary Abnormalities and Clinical Outcomes

Sun Ryoung Choi¹, Hoon Suk Park¹, In O Sun¹, Hyun Gyung Kim¹
Yu Ah Hong¹, Byung Ha Chung¹, Ji-Il Kim², In Sung Moon²
Bum Soon Choi¹, Cheol Whee Park¹, Yong Soo Kim¹, Chul Woo Yang¹

Division of Nephrology Department of Internal Medicine¹, Department of Surgery²
The Catholic University of Korea Seoul Korea

Background: There are no definite guidelines about kidney donation in the prospective kidney donors with asymptomatic urinary abnormalities. We evaluated the pathology of prospective kidney donors with asymptomatic urinary abnormalities and assess the clinical outcomes of the donated kidneys.

Methods: We reviewed the medical records of 18 prospective kidney donors who underwent kidney biopsy. The indications of kidney biopsies were asymptomatic microscopic hematuria (n=14, 78%), decreased glomerular filtration rate (GFR) (n=2, 11%), proteinuria (n=1, 5.5%), history of gross hematuria (n=1, 5.5%).

Results: Thin basement membrane disease (TBMD) is the most common cause of the asymptomatic microscopic hematuria (n=7, 50%), followed by: non-specific finding (n=4, 29%), IgA nephropathy (n=2, 14%) and Alport's syndrome (n=1, 7%). Donation rate was 50 percent (9/18). Nine of the 14 who had asymptomatic microscopic hematuria donated their kidneys; five out of seven donors with TBMD and four donors with non-specific finding. The functions of nine grafts were relatively stable (mean serum creatinine level: 1.94 mg/dL) during a median follow-up period of 57 months. Graft failure was developed in two grafts, but it was not associated with biopsy findings (acute rejection and patient death with functioning graft). Interestingly, hematuria disappeared during follow-up period for all recipients, and protocol biopsies (n=5) at two weeks showed no difference of pathologic findings compared with those of pretransplant period. Follow-up biopsies (n=5) showed increased glomerular sclerosis without tubulointerstitial changes.

Conclusion: Kidney biopsy in prospective kidney donors with asymptomatic urinary abnormalities provides useful information for determining donation.

Key Words: 신장 공여자, 신장 조직 검사, 무증상의 비정상 소변검사
Prospective Kidney Donor, Urinary Abnormalities, Kidney Biopsy