F-E3

이식 신 소실에서의 임상 경과

서울대학교 병원 신장내과[1], 서울대학교 병원 장기이식센터[2], 서울대학교 의과대학 장기이식 연구소

정종철[2], 권혁용[2], 김윤정[2], 구태연[2], 전희중[1], 한미연[1], 안규리[1], 양재석[2]

Failed Renal Allograft, Graft Nephrectomy, and Graft Intolerance Syndrome

Jong Cheol Jeong[2], Hyuk Yong Kwon[2], Yoon Jung Kim[2], Tai Yeon Koo[2]
Hee Jung Jeon[1], Miyeun Han[1], Curie Ahn[1], Jaeseok Yang[2]

Department of Internal Medicine[1] Seoul National University College of Medicine
Transplantation Center[2] Seoul National University Hospital
Transplantation Research Institute, Seoul National University College of Medicine

Background: As kidney transplantation (KT) cases have accumulated, optimal management of failed kidney, and preparation for re-transplantation become important issues. Allosensitization could be a major hurdle to successful re-transplantation. We investigated natural course, and management of failed renal allograft, and its impact on allosensitization.

Methods: Among 1274 KT cases which were performed in Seoul National University Hospital during 1996-2012, cases of failed graft were reviewed. Clinical variables including panel reactive antibody (PRA), nephrectomy, and graft intolerance syndrome (GIS) were studied.

Results: Over the 3.7 years of median follow-up period, 100 patients lost renal allografts. The mean age at KT was 30.0±17.5 years old. The mean graft survival was 4.7±4.2 years. Thirty nine patients received nephrectomy. The mean graft survival was shorter in patients with nephrectomy (2.2±2.8 vs. 6.2±4.3 years, $p<0.001$). There was no mortality related to nephrectomy. Desensitization, diabetes, or cardiovascular disease were not associated with the nephrectomy group; however, hypertension was associated with the group without nephrectomy (OR 20.9, p=0.029). GIS was cause of nephrectomy in 28.2% of cases, and more prevalent in late (>1 years after KT) nephrectomy group (43.5% vs 6.25% p=0.014). Acute rejection was the most common cause of nephrectomy in both early and late nephrectomy groups. Primary nonfunction (25%) and surgical problem (25%) were second most common causes in early nephrectomy group, whereas fever (17.4%) and graft malignancy (13.0%) was in late graft nephrectomy. PRA class I/II increased after graft failure (Class I; 5.2±15.2 vs. 34.0±40.7, p=0.002, Class II; 11.9±28.1 vs. 34.1±30.8, p=0.008, respectively). There were no significant difference in PRA class I/II after graft failure between patients with or without nephrectomy. Among the 23 cases of kidney re-transplantation, there was no difference in acute rejection incidence (60% vs. 69.3%, p=0.685), rejection free survival (10.5 days vs. 11 days, p=0.535), and PRA prior to 2nd transplant (Class I; 0±0 vs. 34.4±43.4, p=0.109, Class II; 27.2±42.1 vs. 16.6±22.1, p=0.553) between the nephrectomy group and the nephrectomy-free group.

Conclusions: Allosensitization could be accompanied by failed graft, and needs to be carefully monitored for re-transplantation. Nephrectomy did not increase either allosensitization or acute rejection.

Key Words: 신장 이식, 이식 신 불내성 증후군, 이식 신 적출
Failed Renal Allograft, Graft Nephrectomy, Graft Intoleran