

Abstract Submission No.: A-0651

Recurrent and De Novo Focal Segmental Glomerulosclerosis After Kidney Transplantation: A Comparison of Clinical Features and Transplant Outcomes

Do Kyun Kim, Bon Jin Koo, Kyu Won Jang, Byung Min Ye, Seo Rin Kim, Dong Won Lee, Soo Bong Lee, Il Young Kim

Department of Internal Medicine-Nephrology, Pusan National University Yangsan Hospital, Korea, Republic of

Objectives : Focal segmental glomerulosclerosis (FSGS) stands out as a significant glomerulonephritis subtype in kidney transplantation, frequently leading to graft failure. However, there has been limited research comparing transplant outcomes between de novo and recurrent FSGS. This study aims to compare clinical features and transplant outcomes between these two categories.

Methods : In this retrospective study, 773 kidney transplant recipients from two centers were enrolled between January 2008 and October 2021. The study included patients diagnosed with FSGS through graft kidney biopsy. Based on the time of FSGS occurrence and results of native kidney biopsy, patients were categorized into two groups: the recurrent FSGS group and the de novo FSGS group.

Results : Out of 773 kidney transplant patients, 24 were diagnosed with primary FSGS as the cause of end-stage renal disease (ESRD). Over a median 65-month follow-up, 5 out of 19 patients with primary FSGS developed recurrent FSGS (incidence: 26.3%). Among 749 transplant patients diagnosed with kidney disease other than primary FSGS as the cause of ESRD, 9 were diagnosed with de novo FSGS (incidence: 1.2%). In recurrent FSGS, there were no patient deaths or acute rejections, and 2 out of 5 patients experienced graft failure. In the de novo FSGS group, there were no patient deaths or acute rejections, and 3 out of 9 patients experienced graft failure. Kaplan-Meier survival analysis (Figure 1) revealed graft loss develops more slowly in de novo FSGS than recurrent FSGS. The patients in the de novo FSGS group exhibited a higher graft survival rate compared to those in the recurrent FSGS group (probability of graft survival, 60% vs. 33.3%, Log-rank $P = 0.036$).

Conclusions : Graft loss evolves more gradually in de novo FSGS compared to recurrent FSGS, leading to a higher long-term graft survival rate in de novo FSGS than in recurrent FSGS.

Figure 1.jpg

Graft survival

