

Title: Post-transplant Recurrence of Focal Segmental Glomerulosclerosis: Critical appraisal and Consensus Guidelines

Author(s): Swathi Jothi, Rupesh Raina

Affiliation: Cleveland Clinic Akron General Medical Center

Introduction: Focal segmental glomerulosclerosis (FSGS) is the leading cause of nephrotic syndrome in both adult and pediatric patients and frequently leads to end-stage kidney disease. Recurrence of FSGS after kidney transplantation increases the morbidity and mortality. There are no consensus guidelines for identifying those patients who are at risk for recurrence or for managing recurrent FSGS (rFSGS).

Objectives: To conduct a critical appraisal of current literature pertaining to rFSGS and provide a consensus guideline on its diagnosis and management.

Methods: We performed a literature search on PubMed/Medline, Embase, and Cochrane with the help of the Cleveland Clinic librarian. The workgroup consisted of two reviewers who screened the identified articles for relevance, and the third reviewer resolved any disagreements. Afterwards, recommendations were proposed and graded for strength of evidence. Of the 614 initially identified studies, 221 were found suitable to formulate consensus guidelines for recurrent FSGS. The following data were extracted from transplant recipients: age, sex, ethnicity of patient, type of donor, number of acute rejection episodes and 5-year graft survival rates. Outcomes (with 95% confidence interval, CI) were the incidence of rFSGS, episodes of acute rejection, and 5-year graft survival. A meta-analysis of these outcomes was conducted.

Conclusion: The guidelines focus on the definition, epidemiology, risk factors, pathogenesis, and management of recurrent FSGS. We conclude that additional studies are required to strengthen the recommendations proposed in this review.