

DE NOVO FOCAL SEGMENTAL GLOMERULOSCLEROSIS (FSGS) FOLLOWING RENAL TRANSPLANT IN A PATIENT WITH AUTOSOMAL DOMINANT POLYCYSTIC KIDNEY DISEASE (ADPKD). *Swetha Nataraj, Vinitha Vellanki, Atiq Dada, Fabiola Balarezo, K. Vinay Ranga.* Medicine /Pathology / Transplantation, Hartford Hospital / UCHC, Hartford, CT.

FSGS is well described in the transplant literature, both recurrent & de novo. In patients with ADPKD, post transplant FSGS poses a unique question, whether it is truly de novo or recurrent, as therapeutic options tend to be different. Kidneys with ADPKD are not biopsied for obvious reasons, & native glomerular pathology may be underreported.

A 50 year old woman with ESRD from ADPKD was on HD since 1996, & Pre-dialysis proteinuria was 2.2 gm/24 hrs. She received a cadaveric renal transplant in 2005, & was stable on prednisone, MMF & Tacrolimus with Scr of 1.5 mg/dl, & UA in 2005-06 did not reveal protein. In Feb 2007, she was hospitalized with acute renal failure, with Scr of 6.4mg/dl, proteinuria 5gm / 24 hr & S alb of 2.3gm/dl. Patient had never received Sirolimus. Biopsy showed a segment of focal sclerosis in 1 glomerulus, ATN, & CNI nephrotoxicity. Tacrolimus was stopped, & the patient was maintained on MMF, prednisone, diuretics & ACE inhibitors. Scr slowly improved to 2.3 mg/dL, but rose again to 4.8 mg/dL in 2 months. Re-biopsy showed segmental sclerosis in 3 glomeruli, moderate interstitial fibrosis, & focal interstitial inflammation. The patient was then started on a steroid taper. She presented to clinic a month later with worsening renal function, and 24 hour proteinuria of 12 gm. Biopsy now showed Class Ia acute cellular rejection, & features of FSGS, moderate interstitial fibrosis and ATN. The steroid taper was restarted, but renal function continued to decline down to uremia, necessitating return to dialysis..

Post transplant FSGS has been shown to respond to plasmapheresis, which is standard of care for recurrent FSGS. In patients with de novo FSGS, early biopsies also show evidence of podocyte effacement on EM which suggests minimal change disease, and only subsequent biopsies show the light microscopic lesions of FSGS. Therefore, plasmapheresis is not performed early on in de novo FSGS. Also, there is no data in the literature that supports the use of steroids or any other therapies for treating de novo post-transplant FSGS.

