Supplementary Material

Methods:

Retrospective study conducted at VPS lakeshore Hospital, Kochi .Total of 80 participants were included in the study. Study duration was one year.

Criteria for genetic analysis included chronic kidney disease of undetermined etiology in whom a renal biopsy was deemed unsafe or impractical or biopsy proven FSGS and post transplant thrombotic microangiopathy or child with family history of steroid resistant nephrotic syndrome . Genetic analysis was done by whole exome sequencing.

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Mutations - identified	No of Patients	Disease
ADAMTS 13	2	TMA
COL4A5	4	ALPORT SYNDROMRE
COL4 A4	2	ALPORT SYNDROME
INF 2	3	FSGS
CFHR	1	ATYPICAL HUS
CFH	1	ATYPICAL HUS
TRPC6	1	FSGS
NPHP 1	1	SENIOR LOKEN SYNDROME

Table 1: Prevalence of different genes

CKD	Renal Transplant recipients	Child hood Nephrotic syndrome (NS)
CGN without biopsy -**52** (**Indication** : screening prior to transplant as per study protocol) Biopsy proven FSGS -**8** **(Indication:** Screening for genetic causes of FSGS prior to transplant)	Developed Post transplant thrombotic microangiopathy (TMA). -**14** (**NKD were Diabetic kidney disease, IgA nephropathy, Hypertensive Nephrosclerosis**) (**Indication** : Screening for genetic mutations causing TMA, and for prognostication) Failing allograft and were planning for a second transplantation with features of chronic TMA on biopsy -**4** (**Indication** : Screening for genetic mutations causing TMA, and prognostication prior to 2nd transplantation)	Steroid resistant Nephrotic syndrome -**2** (**Indication :**To identify chance of recurrence after transplant)

Table 2: Cause of renal function impairment and indications of genetic testing

Note : All CKD , NS, Failing allograft patients were screened prior to transplantation

	Total no participants	Mutations identified
CGN without biopsy	52	COL4A5 - 4 participants CFH R -1 participants* CFH- 1participants* NPHP – 1 participants *Successfully transplanted by adapting ***Netherlands protocol***
FSGS	8	INF2 - 3 participants COL4A4 – 2 participants VUS – 3 participants

Post transplant TMA	14	ADAMTS13 -2 participants *__*both lost their graft*__
Renal allograft failure with TMA features on biopsy	4	All were Negative
Childhood Nephrotic syndrome	2	Col 4A5 TRPC6

Table 3 : Cause of renal function impairment and mutations identified

Note: All patients were screened prior to transplant except who developed post transplant TMA