THE KOREAN SOCIETY OF NEPHROLOGY
APCN & KSN 2024
June 13(Thu) - 16(Sun), 2024 Coex, Seoul, Korea
APSN
Promoting Sustainable Kidney Health: The Asia-Pacific and Beyond

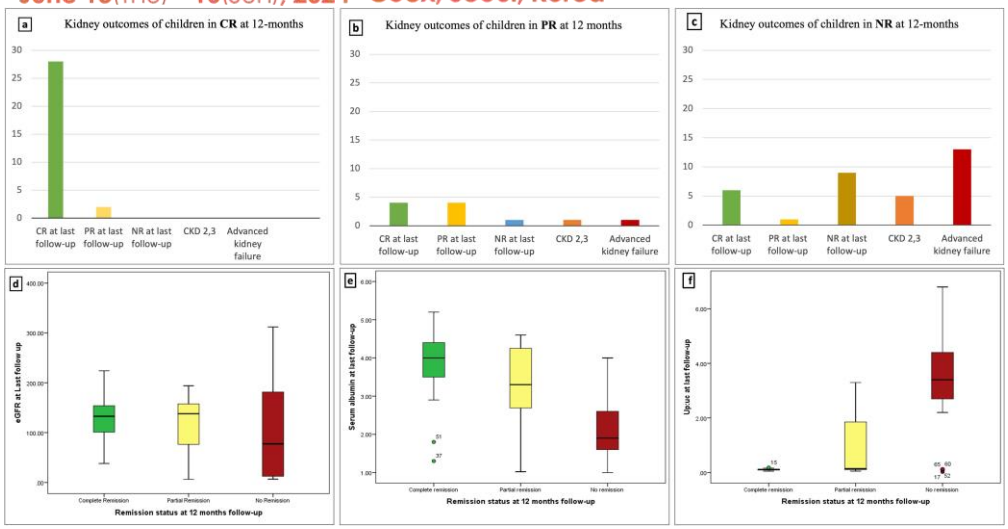
Abstract Submission No.: A-0933

Kidney Outcomes in Children with Primary Focal Segmental Glomerulosclerosis from a Low Middle Income Country

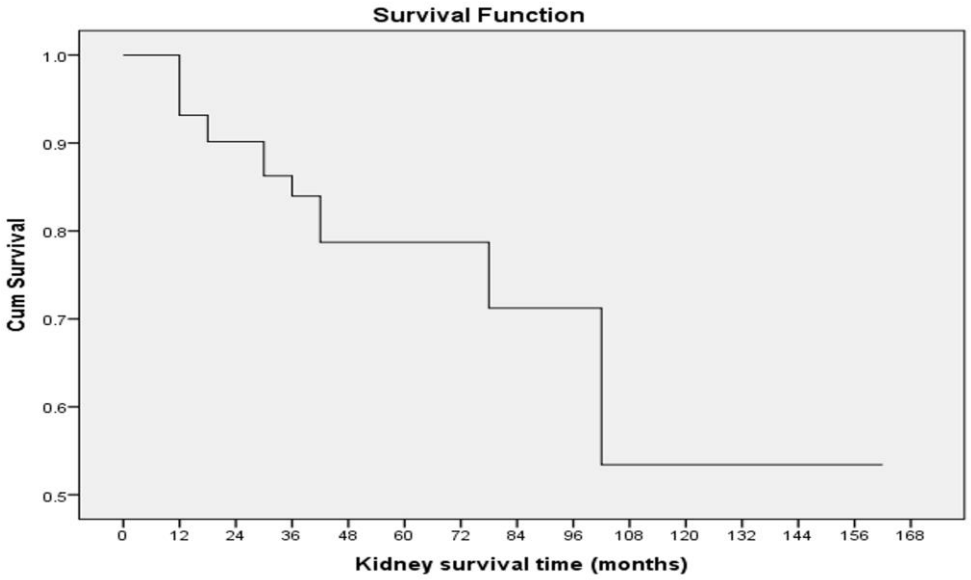
Bobbity Deepthi[1], Kolluri Priyanka[1], Sudarsan Krishnasamy[1], Rajesh Nachiappa Ganesh[2], Madhileti Sravani[1], Sriram Krishnamurthy[1]
[1]Department of Pediatrics-Nephrology, Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), India
[2]Department of Pathology, Jawaharlal Institute of Postgraduate Medical Education and Research, India

Objectives : Limited data exists regarding the clinical course and outcomes of children with primary focal segmental glomerulosclerosis (FSGS) from low middle income countries. The objectives of the study were to determine the kidney outcomes at last follow-up (in terms of remission status and progression to chronic kidney disease stage 2-5) and identify the clinical and histological predictors of adverse outcomes.
Methods : Children aged 1-18 years with biopsy-proven primary FSGS followed from January 2010-June 2023 in a tertiary-care center were enrolled and their clinical profile, histological characteristics, kidney outcomes, and predictors of adverse outcomes were determined
Results : Over a span of 13 years, 73 (54.8% boys) children with median (IQR) age at FSGS diagnosis of 6.7 (3,10) years were recruited and followed up for a median 4 (2.5,8) years. FSGS-not otherwise specified (NOS) was the most common histological subtype, seen in 64 (87.6%) children, followed by collapsing variant in 5 (6.8%) children. At last follow-up, 43 (58.9 %), 2 (2.7%) and 28 (38.3%) children were in complete-remission (CR), partial-remission (PR), and no remission (NR) respectively. Calcineurin inhibitors led to CR or PR in 39 (62%) children. Overall, 21 (28.7%) children progressed to chronic kidney disease (CKD) stage 2-5 (19 from NR vs. 2 from PR group; p=0.03); with 41% of those who were NR at 12 months progressing to CKD stage 4-5 by last follow-up (Fig 1). On multivariable analysis, collapsing variant [adjusted HR 7.1 (95% CI 1.5, 33.3), p=0.012] and segmental sclerosis >25% [aHR 9.5 (95% CI 2.5, 36.6), p=0.001] predicted kidney survival (Fig 2).
Conclusions : In children with FSGS, response to immunosuppression predicts kidney survival as evidenced by nil to lower progression to CKD stages 2-5 in children with complete and partial remission compared with those with no remission. Segmental sclerosis >25% and collapsing variant predicted adverse outcomes

Kidney outcomes.jpg



Kidney outcomes.jpg



Time	12	24	48	72	96	120	144	168
At risk	73	55	41	29	21	15	12	5
CR	30	28	20	14	10	7	6	1
PR	11	7	7	5	2	1	0	0
NR	32	20	14	10	9	7	6	4