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First Pediatric Deceased Donor Kidney Transplant in Chhattisgarh

Dear Editor,

In India, pediatric kidney transplant (KT) was started in the 1990s.¹ In the United States, approximately 800 pediatric KTs are performed annually. No national registry tracks the number of pediatric transplants performed or on the waiting list in India.² There are a few pediatric transplant facilities in the public sector. We share our experience with the first pediatric deceased donor kidney transplant (DDKT) in Chhattisgarh.

A nine-year-old male was diagnosed with end-stage kidney disease in November 2022. His family was counseled about preemptive KT; however, no suitable donor could be identified. He required emergency hemodialysis owing to fluid overload followed by the initiation of continuous ambulatory peritoneal dialysis. Later, he was registered for the DDKT program, and after being waitlisted for nine months, he was offered a kidney from a 15-year-old child who was declared brain-dead after a traumatic brain injury.³ He was discharged with a nadir creatinine of 0.21 mg/dL on postoperative day ten. At two months of follow-up, the child is doing well with creatinine 0.42mg/dL.

State Organ and Tissue Transplant Organisation (SOTTO) was formed in Chhattisgarh in 2022,⁴ which paved the path for deceased organ donation. The organ allocation policy of SOTTO gives priority to pediatric patients if the deceased donor is a child.

Pediatric kidney transplantation rates in developing countries are reported to be as low as < 4 pmcp (per million child population).⁵ Finding a suitable living donor is a critical limitation. Children should not be left out in deceased donor registrations. Since November 2022, 14 DDKT have been done in Chhattisgarh, highlighting the role of public sector hospitals in kidney transplantation and making it accessible to children.

Conflicts of interest: There are no conflicts of interest.

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Challenges and Considerations in Metformin Use for ADPKD: A Commentary on Recent Findings

Dear Editor,

We are writing to provide our perspective on the recently published study by Venkatasubramanian *et al.*¹ The authors' investigation into the efficacy of metformin in nondiabetic patients with autosomal dominant polycystic kidney disease (ADPKD) adds to the growing body of literature exploring novel therapeutic avenues for this challenging condition. The study's findings, particularly the observation that metformin did not significantly slow the progression of the disease as measured by changes in estimated glomerular filtration rate (eGFR) and height-adjusted total kidney volume (htTKV), are consistent with previous trials such as the Trial of Administration of Metformin in Polycystic Kidney Disease (TAME-PKD) study and the work of Brosnahan *et al.*² However, this study stands out for its focus on a low-risk cohort (Mayo Class 1A-C) and its attempt to elucidate metformin's potential renoprotective effects in a more uniform population with well-preserved renal function at baseline.¹ The metformin's proteinuria-reducing capacity and protection from renal cancers in the diabetic population is mentioned due to its vascular endothelial growth factor (VEGF) induction pathway.³⁻⁵ Besides that, type 2 diabetes patients experience renoprotective effects in terms of eGFR change with the flozin group of drugs.⁶ The readers couldn't see the benefits of metformin intervention due to baseline differences during the recruitment. The study's results raise important questions about the role of metformin in ADPKD management, particularly regarding its long-term impact and the challenges in maintaining therapeutic doses in this population. Only 46.1% of participants in the metformin arm tolerated the total dose, highlighting the need for further research into optimizing dosing regimens, possibly through personalized medicine approaches that account for individual tolerability and disease characteristics.

Moreover, the study's findings underscore the potential limitations of short-term follow-up in capturing the full extent of metformin's effects. The nonsignificant differences observed may be a function of the study's duration rather than the inefficacy of the intervention. Therefore, as the authors suggest, extended follow-up studies with larger sample sizes are crucial to determine whether metformin could offer meaningful clinical benefits in the ADPKD population.¹

In conclusion, while this study adds valuable data to the ongoing discourse on metformin's role in ADPKD, it also highlights the need for further investigation. Future studies should focus on more extended follow-up periods, personalized dosing strategies, and a more comprehensive assessment of patient-reported outcomes to understand the potential of metformin in this context.

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