NEPHROLOGY - I

RECENT ADVANCES IN PEDIATRIC NEPHROLOGY

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Abstract: *The world has witnessed tremendous developments in the field of pediatric nephrology over the last two decades. Genetic analysis has played a significant role in the diagnosis and planning of preventive and therapeutic strategies for several kidney disorders. Numerous structural and functional biomarkers for acute kidney injury have now been identified. The application of monoclonal antibodies has led to improved survival. Dialysis and transplantation services for children are now more accessible than before. Recent evidence-based consensus guidelines on steroid-sensitive and steroid-resistant nephrotic syndrome, congenital nephrotic syndrome, hemolytic uremic syndrome, hypertension, chronic kidney disease and urinary tract infection have harmonized the evaluation and management of these common disorders.*

Keywords: *Pediatric nephrology, Recent advances, Kidney diseases, Genetics.*

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Points to Remember

- ***Next-generation sequencing can help establish a diagnosis or identify a monogenic cause in up to 30% of cases of steroid-resistant nephrotic syndrome, 60-70% of complement-mediated thrombotic microangiopathy, 50-80% of renal tubular disorders and 15-20% of severe kidney malformations.***
- ***Identification of a genetic cause will help in counselling the family, prognostication, and deciding on further therapeutic options.***
- ***Access to dialysis and transplantation services for children has significantly improved over the past decade and understanding the basic tenets of these techniques is necessary for the pediatricians to provide basic care and emergency services, whenever required.***
- ***Standard guidelines have now been framed for evaluating and managing common kidney disorders.***

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