NEPHROLOGY - II

DIALYSIS IN CHILD

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Abstract: Kidney replacement therapy is the treatment modality of choice in children with either severe acute kidney injury or end stage kidney disease. The various modalities of kidney replacement therapy are peritoneal dialysis, hemodialysis, continuous kidney replacement therapy and renal transplantation. Selection of appropriate dialysis modality for children is based on the patient's characteristics, indications of dialysis, availability and expertise. In this review, various modalities of dialysis in children are discussed, focussing on prescription writing, advantages and limitations of each modality.

Keywords: Kidney replacement therapy, Children, Dialysis, Acute kidney injury, Chronic kidney disease.

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Points to Remember

- Kidney replacement therapy is the modality of choice in children with severe AKI and end stage kidney disease.
- No modality is superior to another in terms of outcome; therefore, careful selection is based on the patient's status, availability and expertise.
- Continuous forms of dialysis like peritoneal dialysis and CKRT are more physiological and provide slower and gentle solute clearance, making them suitable for hemodynamically unstable children.
- Intermittent hemodialysis can be performed only in hemodynamically stable children and has the advantage of rapid removal of solutes and water.
- Timely initiation of the appropriate modality is crucial.

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