

A Guide for Patients and Families

Guide on Continuous Renal Replacement Therapy (CRRT)

Overview

Continuous Renal Replacement Therapy (CRRT) refers to a slower method of continuous dialysis to support kidney function temporarily for critically ill patients with acute kidney injury or fluid overload.

This treatment gently removes waste products and extra fluid from the body. This keeps chemicals and electrolytes, like potassium and phosphorus, in the blood balanced.

How is it done?

- A dialysis catheter (Vascular Catheter) will be inserted by the doctor into a large vein either in the neck or at the groin. This procedure carries a risk of bleeding and infection.
- After insertion of the dialysis catheter, a dialysis machine will be connected to the catheter, via which the dialysis will be initiated. This dialysis may go on continuously for a few days.
- Continuous dialysis draws out waste and fluid at a slower rate every hour, making it safer and more tolerable in critically ill patients, as compared to intermittent haemodialysis which draws out fluid at a faster rate within a shorter time span.





How does continuous dialysis work for patients?

Patient's blood, containing toxins and waste products, will be drawn out and circulated through a dialyzer. The dialyzer acts as an 'artificial kidney' that helps to remove excess waste, toxins and fluid from the blood, after which the 'cleansed' blood is then returned to the body.

What can you expect during the continuous dialysis?

Frequent blood tests will be carried out while patient is on continuous dialysis. This is to evaluate the patient's progress and their response to the treatment.



When can the dialysis be stopped?

- Doctors will review patient daily to decide on the need for continuous dialysis.
- Dialysis may be stopped when the reason for the initiation of dialysis is resolved or with the improvement of kidney function.
- Dialysis may also be stopped intermittently due to hemodynamic instability or for procedures/scans.

Care and Management

- A patient on dialysis will be taken care of by a trained dialysis nurse who will monitor the patient's response to the dialysis and initiate or titrate medications that help support patients during the dialysis.
- Alarms may go off during the dialysis which alerts the nurses to change solution bags or reposition the catheter to help the treatment run smoothly. Do not adjust the switches and alarms of the equipment as this may affect the safety of the patient.
- Be careful not to pull off any tubing attached onto the patient accidentally.



During dialysis, it may cause:

- A temporary drop in the patient's blood pressure.
- A reduction in the levels of some blood components.
- A reduction in body temperature.

Nurses will monitor patient closely during the dialysis and provide interventions as required.

Please consult the doctors or nurses for more information.