balloonnotes

children'shealth

Understanding Continuous Renal Replacement Therapy (CRRT)

Healthy kidneys get rid of waste and extra fluids by producing pee. When our kidneys are not working well, we stop peeing and begin to hold on to the waste and fluids. This can cause swelling and make us feel sick.

What is CRRT?

CRRT is a form of dialysis that gently filters and cleans your child's blood by removing waste products and extra fluids. It also helps balance key electrolytes like potassium, phosphorus, and sodium.

Why do we use CRRT?

- When a child becomes very sick in the ICU and their kidneys are not working well, CRRT will do the work of the kidneys.
- A doctor will insert a large IV line through the neck, chest, or groin (called a catheter) to start the CRRT therapy.

How does CRRT work?

- **Large IV catheter:** The catheter is inserted through your child's neck, chest, or groin and ends in a large vein of the body. It has a "y" shape and has two tubes. This allows for one tube to remove blood from the body and the other to return the clean blood to the body at the same time.

- **The Machine:** A machine with a filter (that works like the kidney) removes blood from the catheter. The blood goes through the filter, is cleaned, and returns to your child's body through the same catheter.

- **Continuous Cleaning:** The CRRT therapy runs slowly, 24 hours a day. It cleans your child's blood and removes waste and extra fluids. This does the work for your child's kidneys while they are sick. It is gentle on the body, which is best for sick ICU patients.

- **Medicine:** The doctor will order a medicine (heparin, bivalirudin, or citrate) to keep your child's blood from clotting while it goes through the filter. The medicine helps by thinning your child's blood.

What to expect?

- The CRRT is done until the kidneys start to work again or your child is no longer very sick. It may need to run for a few days or many days. If the kidneys do not start to work again, your doctor may talk to you about another type of dialysis for your child.

PEID 1131

© Children's Health This information is not intended as a substitute for professional medical care. Always follow your health care professional's instructions.

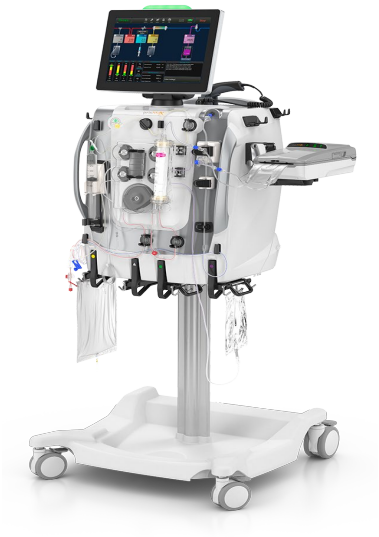
balloonnotes

children's health

What does a CRRT machine look like?

CRRT machines may look different from one another, but they all do the same thing. The CRRT machine your child uses may look like one of these.

Prismax



Carpediem

Aquadex

© Children's Health This information is not intended as a substitute for professional medical care. Always follow your health care professional's instructions.