Continuous Renal Replacement Therapy (CRRT)

Continuous Renal Replacement Therapy (CRRT) is a 24-hour non-stop dialysis therapy used to support patients with renal (kidney) failure.

CRRT gently filters and cleans your child’s blood. Your child will need a special intravenous (IV) catheter in one of his or her large veins (usually in the neck or groin) for this treatment. The blood is removed from the body through the IV and sent through the CRRT machine. The blood is pumped through the filter, which cleans it and returns it to the body.

CRRT is needed when the kidneys are no longer able to remove enough waste and water from the blood. In this case, your child may need CRRT until the kidneys begin to work again. CRRT works like the kidneys to remove harmful waste and fluid. This helps keep the right balance of chemicals and electrolytes, like potassium and sodium, in your child’s blood. CRRT does the work of the kidneys while your child’s kidneys are trying to heal and get better.

Before the test

The IV or CVL placement is a sterile procedure. It is up to the doctor placing the line, IV, or CVL, if the parents may stay during the procedure.

During the test

Your child will be connected to the CRRT machine continuously. The machine works best if your child lies still with little movement. Your child may be given medicines, called sedatives, to help the CRRT run more smoothly.
**After the test**

Your child will stay in the Pediatric Intensive Care Unit (PICU) or CTICU while he needs CRRT. As your child’s condition gets better, he or she may be changed to a less frequent dialysis called intermittent hemodialysis.

**More information**

The CRRT machine will alarm for many reasons. The machine frequently alarms to alert the nurse to change solution bags. The machine may also alarm to alert the nurse to change your child’s position so that the machine will run properly.

If you have questions about your child’s renal (kidney) function, please talk to the nephrologist (kidney doctor).