A kidney treatment lifeline

Managing kidney failure is a huge task. But doing so while in a hospital critical care unit makes things even more challenging.

Luckily, a lifeline exists in the form of continuous renal replacement therapy (CRRT), a form of dialysis. Normally, dialysis is an outpatient procedure where a machine does what healthy kidneys normally do – remove fluid and waste from your blood. But sometimes critically ill people are in a hospital bed, and their bodies can't tolerate the stress of normal dialysis.

That's where CRRT steps in.

"It's a very slow filtration of the kidneys while they're in this acute state. Their body may not be able to compensate for that shifting or removal of the toxins and fluids," says Keely Nelson, OSF critical care nurse manager.

"It's supposed to act most like what your kidneys are doing all day, every day," says April Collins, OSF intensive care unit charge nurse. "Compared to [normal dialysis] three times a week with an aggressive pull of toxins."

"We run it 24/7, generally five to seven days at a time," says Leah Hawk, OSF critical care educator.

Nelson, Collins and Hawk have overseen the recent implementation of CRRT at OSF HealthCare Saint Anthony's Health Center in Alton, Illinois.

Someone, generally, would be on CRRT until their condition improves and they can tolerate normal dialysis. Signs providers watch for include producing urine, better blood pressure readings and changing lab values that indicate better kidney function.

"[CRRT] is extremely critical," for patients, Nelson says.

"During COVID, the patients were so incredibly sick and could not handle aggressive dialysis in the hospital. If we were able to provide [CRRT] during COVID, that would have helped a lot of patients to slowly remove those fluids while providers are hydrating them and giving them medications."

Nelson adds that CRRT was already becoming more common at hospitals in the past five years, but the pandemic accelerated things. The concept itself is around 40 years old, she says.

Learn more about kidney care on the OSF HealthCare website.