

Lakeridge Health Citrate Protocol for CRRT

As a brief summary and specific guidance:

The low dose citrate protocol for CRRT was created in 2016. The main reason our hospital switched from the "traditional" citrate CRRT protocol was that we were noticing a significant rise in serum bicarbonate, sodium and corrected calcium with the prior citrate protocol.

The current low dose citrate protocol is CVVHDF with a dose of around 35 ml/kg/hour. This higher prescribed dose was ordered such that the actual delivered dose would be around 25 ml/kg/hour (to account for CRRT stoppages due to tests, machine problems, etc.). However in our experience, the actual delivered dose of CRRT is higher with this current protocol (around 30 ml/min)

We have noticed that correct calcium may rise at about 3 days on our CRRT protocol, but almost always plateaus at that point without issue.

Patients have been on CRRT for over 1 week (longest about 3 weeks) without significant metabolic issues associated with the CRRT.

We always add 4 or 5 meq/L of potassium to the dialysate and replacement fluid. We do not add potassium to the low dose citrate, so adding a potassium of 4 meq/L to the dialysate and replacement fluid is like a potassium of 3 meq/L on traditional RCA CRRT, and adding a potassium of 5 meq/L to the dialysate and replacement is like a potassium of 4 meq/L. Even for significantly hyperkalemic patients, we generally add 4 meq/L of potassium to the dialysate and replacement fluid. I would suggest never using less than 3 meq/L