

CRRT Reference Card – OMAKI Pilot Study

*Optimal **M**ode of Renal Replacement Therapy in **A**cute **K**idney **I**njury*

Enrolled patients will be randomized to either CVVH or CVVHD by the research coordinator. Orders for CRRT (if enrolled in study) will be written by the study coordinator and/or research team and reviewed/cosigned by a Nephrology fellow or staff person.

About the Study

- This is a pilot study to compare two different protocols for CRRT. The goal is to determine if there is a difference in mortality between the two different therapies. Patients will be randomly assigned to one of two treatment groups.
 - One group will receive high dialysate rates with 200 ml per hour of post dilution hemofiltration.
 - The second group will receive high hemofiltration rates without dialysate. The total flow rate will be evenly divided between pre and post dilution replacement.
- Critically ill patients with acute kidney injury (formerly called Acute Renal Failure) receiving CRRT are included
- Patients on chronic renal replacement therapy are excluded
- We will continue with all of our usual practices regarding solutions, anticoagulation, fluid removal and electrolyte replacement, as well as our practice of obtaining nephrology consultation and CRRT orders.
- The main difference you will notice will be much higher flow rates. The flow rates will be calculated by the research coordinators (Virginia Schumann (extension 33214) or Nephrology Resident, Sam Vijayan – Pager 15661).
- Patients can be enrolled up to 36 hours after the onset of CRRT, however, the study coordinators are only available on days Monday-Friday.
- If patients are started on CRRT urgently or during off hours, initiate therapy according to “usual orders”. The patient will be screened the following day and therapy changed if the patient is enrolled.
- If a patient is started on CRRT between Friday evening and Sunday morning, they will not be eligible for the study (due to timing issues).
- The nephrology fellow is expected to screen patients for including when they are consulted for possible CRRT. The nephrology fellow will be responsible for obtaining consent and notifying the study coordinators.
- You can help to recruit patients to the study by asking the nephrology fellow if they have considered this patient for the CRRT (OMAKI) study.
- Patients remain on the study protocol until they meet one of the following criteria:
 - a) able to tolerate IHD and off pressors X 24 hours; or, b) evidence of renal recovery (>500 ml urine in 12 hours with normal K and bicarb).
- The study coordinator will document the total hourly rate of the dialysate, predilution and post dilution volumes at the time of enrolment. If the patient is started on the study protocol at initiation, a default of 2200 ml/hr will be used as the “usual care”. This will be used to ensure that CCTC receives appropriate reimbursement for additional solutions.
- As soon as flow rates are increased, the TMP will rise (this is expected). If the filter pressures increase to the point where alarms occur or the Delta P continues to trend upward during therapy, attempt to correct by increasing the blood flow rate.
- Troubleshoot rising pressures as you would any patient; ensure that filter clotting or access problems are not the problem and troubleshoot according to usual practice.
- If you access, return or filter pressures become unacceptably high with the high flow rates (this is most likely to occur if you are in the high hemofiltration group), lower the flow rates in increments of 50 ml per pump (pre and post) until you have acceptable pressures.
- Leave a note for the research coordinator to let her know why you were unable to achieve the target flow rate.
- If you have questions/experience technical difficulties with the therapy, please don't hesitate to page Brenda (#19914)