**Continuous Renal Replacement Therapy (CRRT)**

**Version 2 Approved 06/21/2017**

No changes will be made to CRRT orders without prior authorization from nephrologist

All electrolyte administration must be authorized by nephrologist

**Nursing Orders**

 Stat

 Routine

 ***Modality***

 SCUF

 CVVH

 CVVHD

 CVVHDF

 ***If filter clots after midnight, restart***

 08:00 am

 ASAP

 ***Blood warmer set at***

 37 Degree C

 \_\_\_\_\_\_\_\_\_\_ Degree C (33 Degree C- 42 Degree C)

 ***Hemofilter***

 M100

 ***Prime system with***

 5,000 units heparin/1L 0.9% NS

 0.9% NS only (heparin contraindicated/HIT)

 ***Net fluid removal rate***

 \_\_\_\_\_\_\_\_\_\_ ml/hr (0-2L)

 Set machine fluid removal rate at \_\_\_\_\_\_\_ ml/hr\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Set machine fluid removal rate at \_\_\_\_\_\_\_ ml/hr\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 ***Blood flow rate***

 \_\_\_\_\_\_\_\_\_ml/min (100-450 ml/min)

 ***Dialysate flow rate***

 \_\_\_\_\_\_\_ ml/hr

 ***Replacement fluid rate***

 \_\_\_\_\_\_\_\_\_\_ ml/hr

 Pre-filter "PBP" \_\_\_\_\_\_\_ ml/hr

 Post-filter \_\_\_\_\_\_\_\_ ml/hr (recommend at least 200 ml/hr)

 ***Additional instructions***

\*NOTE: Maximum 8,000 ml/hr (Dialysate + Replacement + Pre-Blood Pump Flow

 cannot exceed < 8,000 ml/hr)

**IV Fluids - Maintenance Specific Fluid**

 ***Dialysate Solution***

  Potassium Chloride\_\_\_\_\_meq/L

  Magnesium Sulfate\_\_\_\_\_meq/L

 CRRT-Dialysate Soln-0 KCl/1 meq/L Mg (Prismasate BKO 3.5 meq Calcium)

 \*\*\*DIALYSATE=GREEN PORT\*\*\*

 ***Replacement Fluid***

  Potassium Chloride\_\_\_\_\_meq/L

  Magnesium Sulfate\_\_\_\_\_meq/L

 CRRT-Replacement Soln - 0 KCl/1.5 meq/L Mg (PrismaSol Replacmnt Fluid BGK 2.5meq Calcium)

 \*\*\*REPLACEMENT BAG=PURPLE PORT\*\*\*

**Medications**

 ***Anticoagulation***

 Heparin Sodium, porcine 20,000 units syringe IV AS DIRECTED

 HEPARIN FOR CRRT

 HIGH RISK MEDICATION-REQUIRES DOUBLE CHECK AND COSIGN

  Initial bolus \_\_\_\_\_\_\_\_\_\_\_\_\_ Units

  Infuse heparin at \_\_\_\_\_\_\_\_\_\_\_\_\_ units/hr

  Titrate by \_\_\_\_\_\_\_\_ units/hr to maintain target PTT range of \_\_\_\_\_ to \_\_\_\_\_

 ***Electrolyte Replacement:***

 potassium chloride 40 mEq/100 mL IV piggy back

 40 milliequivalent every 8 hours as needed for potassium < 3.5

 potassium phosphate in NS 20 mmol/250 mL IV

 20 millimole every 8 hours as needed for phosphorus < 2.5

 calcium gluconate 100 mg/mL (10%) IV

 2,000 milligram every 8 hours as needed for ionized calcium < 0.95

 magnesium sulfate 2 gram/50 mL IV piggy back

 2 gram every 8 hours as needed for magnesium < 1.8

**Laboratory**

 Call lab results if there are significant changes

 ***Renal Function Panel [C]***

 Morning Draw

 Every 8 hours

 ***Magnesium***

 Morning Draw

 Every 8 hours

 ***Ionized Calcium***

 Morning Draw

 Every 8 hours

 ***CBC***

 Morning Draw

 Every 8 hours

 ***PT***

 Morning Draw

 Every \_\_\_\_\_\_\_\_ hours

 ***PTT***

 Morning Draw

 Every \_\_\_\_\_\_\_\_ hours

 ***Liver Panel***

 Morning Draw

 Every 8 hours