

NATIONAL INSTITUTES OF HEALTH
WARREN GRANT MAGNUSON CLINICAL CENTER
NURSING and PATIENT CARE SERVICES

Standard of Practice: **Care of the Patient Receiving Continuous Renal Replacement Therapy**

I. Assessment

- A. Hourly
 - 1. Check catheter access sites for bleeding.
 - 2. Check distal pulse in the catheterized extremity.
 - 3. Tubing is free of kinks and tension.
 - 4. Pressures for clot formation.
 - 5. Blood flow rate
 - 6. Intake and output from all sources

II. Interventions

- A. Keep the catheterized limb(s) in neutral alignment or position as needed to optimize blood flow through the catheter.
- B. Keep green plastic Kelly clamps at bedside.
- C. Keep supplies for emergent discontinuation of therapy available at all times.
- D. Change catheter site dressing per standard of practice.
- E. Weigh patient daily. If the therapy is being done intermittently, obtain a patient weight pre and post therapy.
- F. Fluid bags to be changed every 24 hours and system to be changed every 72 hours.
- G. Assure labs are drawn as follows:
 - 1. Acute care panel and ionized calcium every 4 hours (begin two hours after the initiation of therapy).
 - 2. Blood sugar every 4 hours alternating with the acute care panel, so that blood sugars are drawn every two hours.
 - 3. Mineral panel, coags and CBC every 8 hours (begin two hours after the initiation of therapy).
- H. Assure ACT is performed as follows:
 - 1. If running citrate, obtain baseline only.
 - 2. If no heparin is being used: baseline and every 8 hours.
 - 3. If heparin is being used: baseline, every 2 hours x 4 and then every 4 hours.
- I. Patient receives priming volume which is approximately 90 cc's.

III. Documentation

- A. Document the following information in MIS or on approved Medical Record form every hour.
 - 1. Vital signs
 - 2. System fluid infusion rates (if applicable):
 - a. Replacement fluid
 - b. Dialysate
 - c. Heparin

3. System pressures:
 - a. Access pressure
 - b. Return pressure
 - c. Filter pressure
 - d. Effluent pressure
 4. Blood flow rate
 5. Total intake and output from all sources
 6. Site check assessment.
- B. Document the following information in MIS or on approved Medical Record form as appropriate during therapy:
1. At the start of therapy
 - a. Patient response to initiation of therapy
 - b. Goals of therapy
 2. During therapy
 - a. Alarms and interventions
 - b. Change in patient condition (including pressor or sedation requirements)
 - c. Alterations in system settings
 - d. ACT and interventions based on test result
 3. Completion/termination of therapy
 - a. Approximate volume of blood returned to patient
 - b. Rationale for termination of therapy
 - c. Patient response to termination of therapy
 - d. Condition of catheter

REFERENCES:

1. National Institutes of Health, Clinical Center Department of Nursing: Procedure: Continuous Renal Replacement Therapy, 1999
2. National Institutes of Health, Clinical Center Department of Nursing, Self -Learning Modules for Patient Requiring Renal Replacement (10D MICU)

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