

HACKETTSTOWN REGIONAL MEDICAL CENTER

ICCU
(Scope)

TITLE: CATHETER - DIRECTED THROMBOLYTIC INFUSION for an ARTERIAL or VENOUS OCCLUSION

PURPOSE: To outline the nursing management for the patient receiving thrombolytic infusion therapy as a primary procedure or post vascular procedure.

SUPPORTIVE DATA:

1. A catheter used for arterial /venous infusion of the thrombolytic agent will be inserted by a physician and discontinued by a physician or the Vascular Lab Nurse.
2. Thrombolytic therapy will be initiated by the physician and maintained by the Vascular Lab staff and then a Critical Care RN when the patient is admitted to ICU.
3. All patients with a continuous thrombolytic agent infusing will be monitored in the ICCU/CCU. Patients are not permitted on the PCU with this infusion or with a femoral sheath still in place.
4. Contraindication to catheter directed thrombolytic therapy include:
 - a. History of intracranial hemorrhage
 - b. Recent major surgery or trauma
 - c. Active internal bleeding
 - d. Bleeding diathesis

PERSON RESPONSIBLE:

1. Procedural Physician, Vascular Lab Staff and Critical Care RN.

CONSENT:

1. A written consent for the procedure and thrombolytic agent used needs to be obtained prior to the procedure and place on the patient's medical record.

PRE-PROCEDURAL CARE:

1. Lab work- Obtain baseline Laboratory work as ordered by the physician.
2. IV Access- Pre-procedure- there should be a minimum of two patent IV sites. Allowing one site to be preserved for lab draws. This will minimize risk of bleeding from unnecessary punctures.
3. Urinary Device- Assess the need for post procedure frequent monitoring of urine output. If needed, a urinary catheter should be inserted pre-procedure to avoid any potential for post procedure bleeding. Catheter to be removed once TPA is completed and there is no longer the need for frequent monitoring.
4. No venipunctures for blood draws or IV's post procedure unless physician orders.

THROMBOLYTICS:

Thrombolytic therapy is started in the Vascular Suite, according to physician order . The Infusion is continued until further orders are given for discontinuation from the physician. All patients requiring continuous thrombolytic infusion are transferred to the ICU.

ASSESSMENT:

1. All assessments start in the vascular suite when the thrombolytic agent is started and continues when the patient is in ICU.
2. Patient should be assessed for any signs of bleeding.
3. Vital sign monitored and record q15 minutes x4, then q30 minutes x4, then hourly x 5. If no changes in vital signs, continue to monitor per unit based standards. Increase monitoring if any changes are noted.
4. Assess neuro status with vital signs. Monitor for hypertension as a predisposing factor to intracranial hemorrhage.

5. Vascular assessment to the affect extremity, to include temperature, color, sensation, at the same frequency of vital signs.
6. Assess any puncture site for bleeding, hematoma and distal pulses bilaterally.
7. If bleeding is noted at the site, apply pressure and notify physician. If unable to contact physician immediately, turn off thrombolytic therapy until physician contact is obtained and thrombolytic therapy is re-addressed.
8. Assess/monitor skin assessment for breakdown and implement prevention per HRMC protocol.

POST LAB VALUES:

1. CBC and Fibrinogen are obtained 6 hours after thrombolytic infusion is started.
2. CBC, CMP, PT/INR, PTT, and Fibrinogen are obtained the following day post procedure.
3. Physician to order how the lab values are to be obtained: Venipuncture, existing IV, or sheath.

ACTIVITY:

1. Maintain HOB no greater than 30° or as ordered by physician if femoral sheath present.
2. Strict bed rest. Log roll patient to move them.
3. The affected extremity with the sheath to remain straight. Knee immobilizer may be used to assist in keeping the leg straight.

REPORTABLES:

1. Notify procedural physician for Hgb < 9 g/dl, Fibrinogen < 100mg/dl
2. Call with results of all ordered post procedure labs unless parameters are ordered.
3. Notify physician immediately for any sign/symptoms of active bleeding, hematoma at any puncture site, complaints of headache, change in mental status, confusion, complaints of abdominal or back pain and/or respiratory difficulty.
4. Notify physician with any changes in vascular assessment of the affected extremity, such as skin color, temp and pulse strength.
5. Notify Wound/Ostomy nurse when any skin breakdown is noted.

Documentation:

1. Document neurovascular assessments on the Post vascular procedure flowsheet.
2. Vital signs are documented on the critical care flowsheet.
3. Document all reportables in the nurses' notes, noting time of assessment or change in status, time of call to physician and any follow up interventions.
4. Use critical test and critical results/value sticker to document critical lab results.

References:

Bussard, M. "Retepase: Nursing Implication for Catheter-Directed Thrombolytic Therapy for Peripheral Vascular Occlusions". Critical Care Nurse Vol 22,no.3 June 2002. page 57-63.

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