THE UNIVERSITY OF TOLEDO MEDICAL CENTER

Nursing Service Guidelines

<u>Title:</u> CATHFLO ACTIVASE

Responsibility: Hemodialysis RN

Equipment:

Purpose: Cathflo Activase (alteplase) is indicated for restoration of function to clotted central venous

access devises as assessed by the inability to withdraw blood.

Action: Alteplase is an enzyme that has the property of fibrin-enhanced conversion of plasminogen

to plasmin. Alteplase binds to fibrin in a thrombus and converts the entrapped plasminogen

Point of Emphasis

to plasmin, thereby initiating local fibrinolysis.

<u>Procedure</u>

Instructions for Administration

Cathflo Activase contains no antibacterial preservatives and should be reconstituted immediately before use. The solution may be used for intracatheter instillation within 8 hrs. of reconstitution when stored at 2-30 degrees C (36-86 degrees F).

- Aseptically withdraw 2.2ml of Sterile Water for Injection USP (water is not provided). Do not use Bacteriostatic Water for Injection. Discard sterile water after single use.
- 2. Inject the 2.2 ml Sterile Water for Injection, USP into the Cathflo Activase vial, directing the stream into the powder. Slight foaming is not unusual; let the vial stand undisturbed to allow large bubbles to dissipate. Solution is colorless to pale yellow.
- 3. Mix by gently swirling until the contents are completely dissolved. Complete dissolution should occur within 3 minutes. **DO NOT SHAKE**. The reconstituted preparation results in a solution containing 1 mg/ml of Alteplase.

<u>Instillation of Solution into the Catheter</u>

- 1. Inspect the product prior to administration for foreign matter and discoloration
- 2. Withdraw 2 ml (2mg) of solution from the reconstituted vial, into a 5 ml syringe.
 - If the catheter lumen fill volume is >2 ml aspirate as much as possible from the vial and aspirate enough Sterile Water for Injection into the 5 ml syringe to equal fill volume + 0.1 ml for catheters.
 - If the catheter lumen fill volume is <2 ml, waste enough to bring syringe volume to fill volume + 0.1 ml for catheters.

Initiation and Termination of Dialysis Procedure Using Double Lumen Dialysis Access Catheters Page 2

Practice Guidelines

- 3. Aspirate heparin from clogged or slow catheter and flush with 10ml normal saline. If unable to aspirate heparin, flush with 10ml normal saline then proceed to next step.
- 4. Instill the appropriate dose of Cathflo Activase into the occluded catheter. Leaving the syringe attached to the catheter, tape in place to prevent pulling. Inform Physician of medication installation.
- 5. After 30 minutes of dwell time, assess catheter function by attempting to aspirate blood. If the catheter is functional, go to Step 7. If the catheter is not functional go to Step 6.
- 6. If catheter function is not restored after one dose of Cathflo Activase, a second dose may be instilled. Repeat the procedure beginning with Step 1 under "Preparation of Solution." If unable to aspirate Alteplase flush through with instillation of 2nd dose. Allow Activase to dwell 2 hours. Physician for further order.
- If catheter function has been restored, aspirate 4-5 ml of blood to remove Cathflo Activase and residual clot, and gently irrigate the catheter with 10 ml normal saline. Proceed with treatment.

Points of Emphasis

See Cautions. (**Heparin is not compatible with Alteplase**.) * See Cautions. Consider decreasing heparin load.

Cautions:

Never forcefully flush an occluded catheter. If firm gentle pressure does not allow flushing, call MD to schedule hospital-declotting procedure.

No other medication should be added to solutions containing Cathflo Activase.

Revised by: Andrew P. Fox, BS, BSN, MBA, HCA, RN

Resource Person:

Approved: 7/04

Reviewed: 7/05, 3/28/11, 9/11, 5/15, 4/17, 5/18, 4/21

Revised: 7/07, 04/08

Reviewed by Policy & Standard Committee, 8/10, 5/2015, 4/2017, 4/21

Reviewed by: Andrew P. Fox, BS, BSN, MBA, HCA, RN

<u>References</u>: Package Insert