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Owner Therese

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Infusion

Pharmacy and

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Area Pharmacy

Applicability UMHS Clinical

References HomeMed,

Procedure

Services

Pharmacy Services HomeMed Catheter Clearance for Venous Access Devices in the Home Procedure

Procedure Statement, Purpose and Scope

- To provide guidance on determining if alteplase can be administered in the home by a registered nurse.
- To standardize the steps for alteplase administration, monitoring, and documentation

Definitions

- VAD: Venous Access Device inclusive of and limited to the following catheter types: peripherally inserted central catheters (PICCs), ports, non-tunneled central venous catheter, tunneled non-dialysis central catheters, valved central catheters.
- 2. Partially Occlusion: Ability to infuse but not withdraw fluids or the presence of sluggish flow.
- 3. Complete Occlusion: Inability to infuse or aspirate.
- 4. **Alteplase**: A Tissue plasminogen activator that as an enzyme binds to fibrin in a thrombus and converts the entrapped plasminogen to plasmin, thereby initiating local fibrinolysis.
- 5. Clinician: a licensed nurse or pharmacist

Areas of Responsibility

HomeMed Nurse, Pharmacist, Pharmacy Technician when delegated with pharmacist oversight

Procedure

- A. Assessment by a HomeMed clinician and in-home registered nurse to identify if a patient is appropriate to receive alteplase in the home for a partial or completely occluded VAD.
 - HomeMed clinician and in-home registered nurse can use "Home Catheter Clearance Reference" (Exhibit 1) for assessment. (See Exhibit 1: Assessment data requisite of review is inclusive of but not limited to: reasons leading to occlusion, verifying the presence of an occlusion, the estimated duration of time the occlusion has existed, patient risk assessment for post procedural bleeding and other documented side effects, allergy history and a medication profile review).
 - Assessment data will be used to substantiate the presence of a fibrin sheath / clot and to rule out the likelihood that a mechanical kink or drug precipitate is the cause of an occlusion. Only the occluded lumen(s) of the VAD should be treated with Alteplase.
- B. Absolute exclusion criteria, Patients will be ineligible to receive Alteplase in the home if any of the following are true:
 - 1. History of hypersensitivity to Alteplase or any components of the formulation
 - 2. Pregnancy
 - 3. Dialysis Catheters
 - 4. Midline Catheters
 - 5. Suspected catheter infection or currently being treated for catheter infection.
 - 6. Any acute serious bleeding risk or surgery or procedure in the last 48 hours.
 - 7. Patients less than 30 kg with unknown/unmeasurable lumen volume

C. Care Coordination

- HomeMed clinician will provide visiting nurse agency with "Home Catheter Clearance Reference" and "Guideline for Use of IV Alteplase for Catheter Clearance" document.
- 2. HomeMed clinician and/or visiting nurse agency will notify prescriber if catheter patency is not restored.
- 3. HomeMed clinician will contact patient/caregiver to complete first follow up note and create care plan after administration of first dose.
- D. Nursing Administration of Alteplase in the Home
 - 1. Obtain / review physician order, identify patient using 2 identifiers, and explain procedure.
 - 2. Inspect drug label, solution and equipment / supplies. Validate all items are usable.

- 3. Follow step-by-step guidelines (Exhibit 2) for use of intravenous Alteplase for catheter clearance.
- 4. Dose of alteplase in patients greater than or equal to 30 kg is 2 mg. Dose for patients weighing less than 30 kg is 110% of the internal lumen volume of the catheter, not to exceed 2 mg. Refer to prescription label for dose.
- E. Monitoring: A registered nurse will assess catheter function:
 - 1. At least 30 minutes after the first instillation of alteplase and up to a total of 120 minutes of dwell time.
 - 2. If catheter function is not restored then repeat previous step one time (if indicated per prescription label instructions).
 - 3. If catheter function is not restored after a repeat dose, then visiting nurse will notify physician/clinic.
- F. Patient\Caregiver Education
 - 1. Review flushing technique and frequency of flushing (e.g. Push-Pause flushing method)
 - 2. Review medication administration and blood drawing technique.
 - 3. On-going therapy provision and care coordination will occur as indicated in the plan of care.

Summary of Changes

Changes to updated practices.

References

- 1. Cathflo Activase [Alteplase] package insert. San Francisco, CA; Genentech, Inc.
- 2. Cathflo Activase (Alteplase). https://www.cathflo.com/
- 3. Nickel B, Gorski LA, Kleidon TM, et al. Infusion therapy standards of practice. J Infus Nurs. 2024;47(suppl1):S1-S285. doi:10.1097/NAN.00000000

Exhibits/Attachments

- 1. HomeMed Home Catheter Clearance Staff Reference
- 2. HomeMed Guidelines for Use of IV Alteplase for Catheter Clearance

Document Approval & Tracking

Item	Contact
Consultant(s)	Therese Adamowski, Nursing Supervisor Corey Edge, Pharmacist, Content Expert
Committee(s)	

Official Approver	Lisa Klein, Pharmacy Manager Therese Adamowski, Nursing Supervisor
Official Signature	On PolicyStat Approval Workflow

Attachments

© Exhibit 2: Guideline for Use of IV Alteplase for Catheter Clearance updated 1.2025

Approval Signatures

Step Description	Approver	Date
DOPS Policy Coordinators	Scott Ciarkowski: Pharmacy Manager, Quality Improvement & Safety and	2/8/2025
DOPS Policy Coordinators	Brett Leja: Regulatory & Compliance Specialist Pharmacist and	2/7/2025
PolicyStat Administrator Review	Olivia Curl: Admin Specialist Inter Health	2/6/2025
PolicyStat Administrator Review	Natalie Plata: Clinical Policy Manager	2/6/2025
Owner Approval	Therese Adamowski: NURSING SUPERVISOR (Michigan Visiting Nurses: Post	2/6/2025

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