



MEDICAL DIRECTIVE

Title: Alteplase (Cathflo®) Instillation for Complete or Partially Occluded Central Venous Access Devices for patients of the Durham Regional Cancer Center Ambulatory Program

Approved by/Date: Medical Advisory Committee – April 26, 2011

Authorizing physician(s)

All oncologists (Medical, Hematologists, and Radiation) practicing in the R.S. McLaughlin Durham Regional Cancer Centre oncology program.

Authorized to who

Registered Nurses in the R.S. McLaughlin Durham Regional Cancer Centre ambulatory program who have completed competency certification for Central Venous Access Device (CVAD) (assessment, care, maintenance) and Cathflo® (alteplase) instillation.

Patient Description / Population

Adult hematology/oncology patients attending the ambulatory program of the R. S. McLaughlin Durham Region Cancer Centre who require restoration of patency to their CVAD including; peripherally inserted central venous catheters (PICC), tunneled catheters, and implanted venous access devices (IVAD).

Medical Directive Description/Physician's Order

Alteplase (Cathflo®) is to be used for intra-catheter administration to restore patency of partial or complete thrombotic occlusions to the CVAD.

Registered Nurses who have competency certification in CVAD (assessment, care, maintenance) and Alteplase (Cathflo®) instillation.

Instill Alteplase (Cathflo®) 2mg (2ml) using a 10ml syringe into occluded lumen of CVAD as per LHC policy & procedure and drug monograph for 30 minutes. After 30 minutes dwell time assess catheter function by attempting to aspirate blood. If catheter function restored aspirate 4-5mL of blood. If catheter function NOT restored refer to policy & procedure for direction.

MEDICAL DIRECTIVE

Title: Alteplase (Cathflo®) Instillation for Complete or Partially Occluded Central Venous Access Devices

Specific conditions/circumstances that must be met before the Directive can be implemented

Registered Nurse must have competency certification in CVAD assessment, care maintenance and also in the instillation of Alteplase (Cathflo[®]).

No evidence of venous thrombosis; warmth, edema, dilated vessels, erythema, pain.

Stable, non-emergent patient.

The Registered Nurse must assess and troubleshoot the CVAD to determine if Alteplase (Cathflo[®]) instillation is the appropriate intervention (See Appendix A).

Contraindications to the implementation of the Directive

1. Allergy to alteplase or to any component of its formulation (e.g. L-arginine, phosphoric acid, polysorbate-80).
2. Patients who have active internal bleeding or who have had any of the following within 48 hours: coronary artery bypass graft surgery, obstetrical delivery, organ biopsy, or puncture of non-compressible vessels.
3. Patients who have:
 - a. Known or suspected infection of the CVAD; particularly with *Staphylococcus Aureus* bacteremia and candidemia
 - b. Thrombocytopenia and/or hemostatic defects (including those secondary to severe hepatic or renal disease: Bilirubin, AST, ALT, and creatinine > 4 times the normal value) or any condition in which bleeding constitutes a significant hazard or would be particularly difficult to manage because of its location, or who are at high risk for embolic complications (e.g., recent pulmonary embolism, deep vein thrombosis, endarterectomy). (Product Monograph, Sept, 2003).

A patient with any of the above contraindications requires an assessment by a physician prior to administration of Alteplase (Cathflo[®])

MEDICAL DIRECTIVE

Title: Alteplase (Cathflo[®]) Instillation for Complete or Partially Occluded Central Venous Access Devices

Identify relevant Delegated Control Act or Added Skill associated with this Directive

- CVAD competency certification
- Medication administration
- Competency certification of Instillation of Alteplase into Complete or Partially Occluded CVAD

Documentation requirements

Order for medical directive will be entered on the physician's order sheet, Alteplase (Cathflo®) 2ml (2mg/2ml) administered as per medical directive".

Details of consultation with physician i.e. The patient has a contraindication, the physician is aware and physician orders to proceed with Alteplase (Cathflo®) instillation).

The Registered Nurse will transcribe/enter the order into the electronic MAR and document the administration of alteplase as per the medical directive on the electronic MAR.

Consistent with the documentation standards of the College of Nurses Ontario the Registered Nurse will document the assessment that led to the implementation of the Medical Directive, procedure implemented, outcomes, evaluation and any follow up in the electronic patient record.

Specific information to be captured in the documentation: amount of alteplase instilled, confirmation of occlusion, dwell time(s), number of lumens, outcome of the procedure, patient teaching, how patient tolerated the procedure.

Review/Evaluation Process (how often/by who)

The medical directive will be reviewed within six months of implementation and then on an annual basis. Review to be conducted by Physician Lead for Medical Oncology, Clinical Education Leader in Oncology, and Patient Care Manager(s).

MEDICAL DIRECTIVE

Title: Alteplase (Cathflo®) Instillation for Complete or Partially Occluded Central Venous Access Devices

Related Documents

Instillation of Alteplase (Cathflo®) into Complete or Partially Occluded Central Venous Access Devices. (2007). Lakeridge Health Corporation.

Instillation of Clearing Agent into an Occluded Central Venous Access Device. (2003). Lakeridge Health Corporation.

References

Cummings-Winfield, C. & Mushani-Kanji, T. (2008). Restoring Patency to Central Venous Access Devices. *Clinical Journal of Oncology Nursing*, 12, 6, 925-934.

Cathflo® product monograph. Roche. (2003).

Central venous catheters, care and maintenance of peripherally inserted central catheters (Groshong®). (2009). British Columbia Cancer Agency.

Care and Maintenance to Reduce Vascular Access Complications. (2008). Registered Nurses Association Best Practice Guideline.

Cathflo® Alteplase (tPA). eCPS. (2011).

Instillation of Alteplase (Cathflo®) into Complete or Partially Occluded Central Venous Access Devices. (2007). Lakeridge Health Corporation.

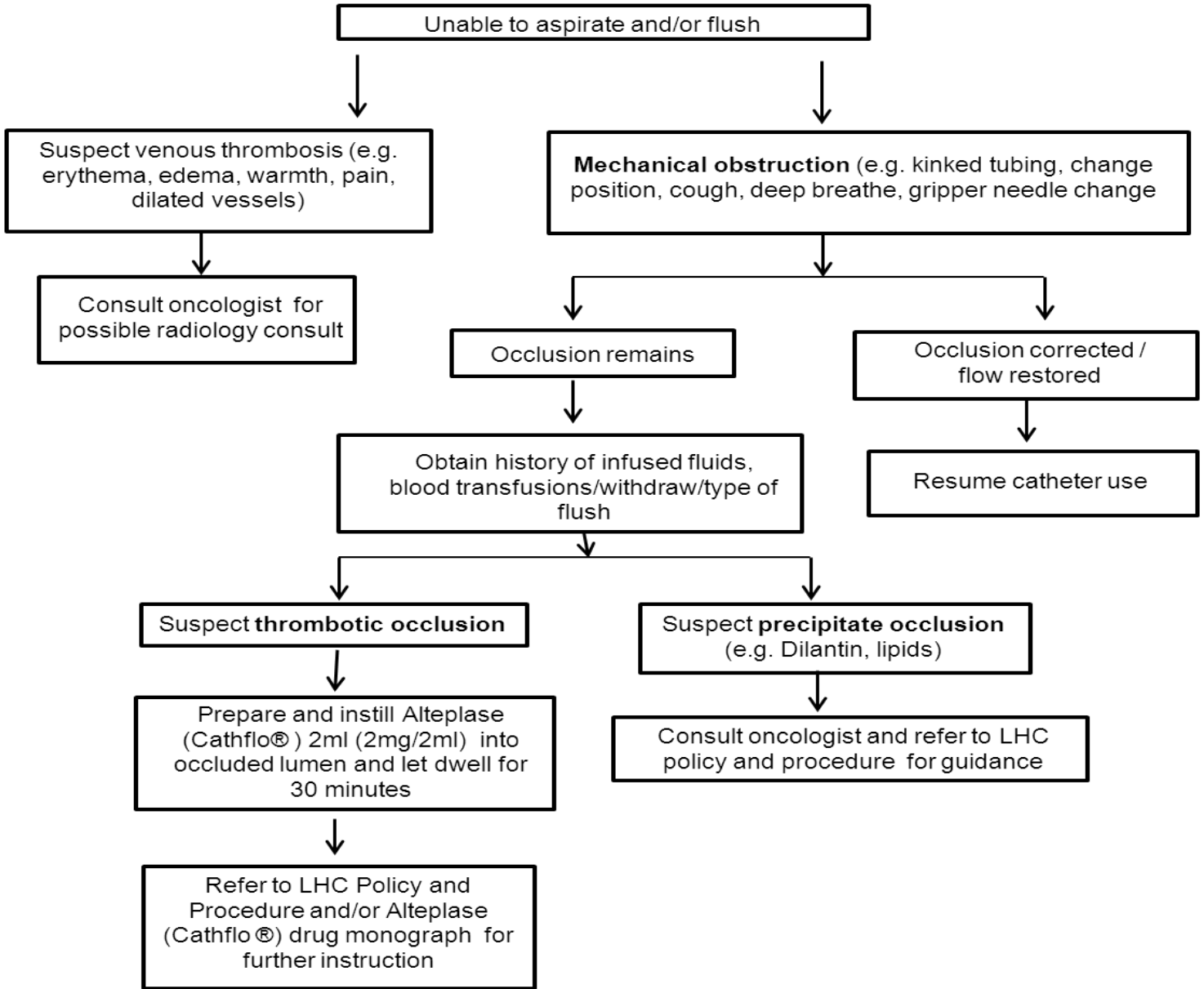
Central Venous Access Devices. Self-Directed Learning Module. A Clear and Simple Approach. (2004). Lakeridge Health Corporation.

MEDICAL DIRECTIVE

Title: Alteplase (Cathflo®) Instillation for Complete or Partially Occluded Central Venous Access Devices

Appendix A

Assessment Algorithm for Alteplase (Cathflo®) Instillation for Complete or Partially Occluded Central Venous Access Devices



*Adapted and Modified from Lakeridge Health Corporation. (2004). Central Venous Access Devices. Self-Directed Learning Module. A Clear and Simple Approach.

MEDICAL DIRECTIVE

Title: Alteplase (Cathflo®) Instillation for Complete or Partially Occluded Central Venous Access Devices

Developed by:	_____	_____	_____
	Name	Position/Title	Program
Contact:	Kim Lawn _____	PCM Systemic Therapy _____	DRCC _____
	Name	Position/Title	Program
(Main Contact – related to the development of the directive)			
Authorized by:	All Oncologists (Medical, Hematologists, and Radiation)	Physician signatures obtained May-July 2011	Contact Medical Affairs Office for details re authorizing physicians & original signatures document

Approvals and Signatures: (Original signatures document available in Medical Affairs Office.)

Department Chief:	Dr. P. Dixon _____	Dr. P. Dixon _____	June 3, 2011 _____
	Name	Signature	Date
Medical Director:	Dr. P. Dixon _____	Dr. P. Dixon _____	June 3, 2011 _____
	Name	Signature	Date
Program Director:	Tamara Dus _____	Tamara Dus _____	Sept 6, 2011 _____
	Name	Signature	Date
Chair of IAC:	Sherida Chambers _____	Sherida Chambers _____	Sept 21, 2011 _____
	Name	Signature	Date
Chair of CNAC:	Sherida Chambers _____	Sherida Chambers _____	Sept 21, 2011 _____
	Name	Signature	Date
Chair of P & T Comm:	Dr. I. Lenga _____	Dr. I. Lenga _____	Aug. 9, 2011 _____
	Name	Signature	Date
Final Approval Chair of MAC:	Dr. M. Treloar _____	Dr. M. Treloar _____	Sept 8, 2011 _____
	Name	Signature	Date

MEDICAL DIRECTIVE

Title: Alteplase (Cathflo®) Instillation for Complete or Partially Occluded Central Venous Access Devices