<table>
<tr><td colspan="2"> </td><td colspan="2">POLICY
Title: PC 239_Thrombolytic Therapy for Acute Ischemic Stroke</td></tr>
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I. Scope:

Line of Responsibility: Emergency Department or attending physician in consultation with neurologist, pharmacist, emergency department or critical care nursing staff

II. Purpose:

To provide the guidelines for safe administration of thrombolytic therapy as part of the management of patients diagnosed with acute ischemic stroke (AIS). This policy is not intended to override the independent clinical judgment of nursing, hospital, or medical staff.

III. Policy:

Thrombolytic therapy may be initiated and administered intravenously in the Emergency Department, Intensive Care Unit, or Neuro Cath Lab per physician order to patients with acute ischemic stroke provided contraindications to therapy are ruled out.

Patients receiving thrombolytic therapy require continuous monitoring including blood pressure, cardiac rhythm, and pulse oximetry. Frequent neurological, cardiovascular, and respiratory assessment is required.

Venipuncture should be limited on patients receiving or have recently received thrombolytic therapy.

Definitions:

Thrombolytic Therapy - Thrombolytic agents are used to dissolve the thrombi that cause acute ischemic stroke. Reperfusion has been shown to improve neurological and functional recovery after an acute stroke when administered early after symptom onset.

National Institute of Health Stroke Scale (NIHSS) – Standardized method used by healthcare professionals to measure the level of impairment caused by a stroke.

This policy and any related procedures or guidelines were developed based on available evidence, regulatory standards, and accreditation requirements. Caregivers are accountable for following policies, procedural steps, and/or guidelines as they carry out their responsibilities. However, no clinical policy, procedure, or guideline can account every situation, so caregivers remain responsible for exercising their clinical judgment within their scope of practice and varying from a policy, procedure, or guideline in the event where the patient's circumstances fall outside the scope of the policy.

IV. Guidelines:

A. Process

1. Identify stroke patients who may be eligible for thrombolytic therapy by confirming an accurate time of last known well (time without current symptoms)
2. Physician should review thrombolytic criteria checklist. The nurse should inform the physician of any contraindication to thrombolytic therapy listed on criteria checklist that have not been previously identified.
3. Physician should explain risks, benefits, and alternatives of thrombolytic therapy to patient/family prior to administration.
4. Obtain patient weight in kilograms.
5. Establish two IV access sites, if possible, prior to thrombolytic administration.
6. Obtain baseline NIHSS score prior to initiation of thrombolytic.
7. Thrombolytics should be determined and ordered by the treating provider.

B. Dosage and Administration

1. The recommended dose of Tenecteplase for treatment of AIS is 0.25mg/kg.
2. The total dose of treatment of acute ischemic stroke shall not exceed 25mg.
3. The medication should be administered as a single IV bolus over five seconds.
4. Only nurses who have completed the Tenecteplase preparation/administration competency validation are authorized to mix and administer Tenecteplase.
5. Nurses in the ER and ICU should calculate the bolus amount and verify with a second RN.
6. Tenecteplase is incompatible with dextrose.

C. Monitoring

1. Monitor and assess patient per physician's orders.
2. Nurse should document assessments in EMR and on *Tenecteplase (TNKase) for Acute Ischemic Stroke Flowsheet*
3. Monitor for bleeding. The most common bleeding risk associated with thrombolytics is hemorrhage. The physician should be notified immediately if hemorrhage is suspected. If intracranial hemorrhage is suspected, a stat head CT should be performed. Intracranial hemorrhage should be suspected secondary to IV thrombolytic administration if the patient exhibits the following signs:
    - i. Onset of new headache
    - ii. Change in level of consciousness
    - iii. Nausea and/or vomiting
    - iv. Increase in NIHSS of 3 points or greater
4. Monitor for allergic reaction. The most common reaction will present as angioedema. Notify the physician immediately if angioedema is suspected. Angioedema may be associated with patients who take ACE inhibitors. Angioedema should be suspected

secondary to IV thrombolytic administration if the patient exhibits the following signs:

i. Acute swelling of the lips or tongue
ii. Altered voice
iii. Complaints of dysphagia

D. Precautions

1. No anticoagulation or antiplatelet medication for 24 hours post IV thrombolytic administration.
2. If possible, avoid intramuscular injections, nasogastric (NG) tube placement, invasive procedures, or invasive line placement for 24 hours post IV thrombolytic administration.
3. IV thrombolytic is for intravenous administration only. Extravasations of thrombolytics can cause ecchymosis and/or inflammation. Extravasation management consists of terminating the infusion at the IV site and application of local therapy.

V. Related Policies:

PC 251 Stroke Management
Guideline: Tenecteplase or Other Thrombolytic Agent Reversal
Guideline: Intracerebral Hemorrhage Management

VI. The Joint Commission Standards:

2019 Joint Commission Advanced Disease-Specific Care Certification Requirements for Primary Stroke Centers Standard DSDF.1

VII. Attachments:

NA

VIII. References:

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