Portage County EMS
Patient Care Guidelines

tPA for Stroke

Note:

- The Guideline applies only to the continuation of tPA administration that a hospital has initiated and will be continued during an interfacility transport.

Priorities	***Assessment Findings***
Chief Complaint	Dignosis of Ischemic Stroke; tPA infused or infusing; Transporting to definitive care facility
OPQRST	When was the patient last seen normal? Was it witnessed? What is normal baseline?
Associated Symptoms/ Pertinent Negatives	Headache, weakness, pupil dilation, slurred speech, aphasia, incontinent
SAMPLE	Medications; history consistent with stroke or TIA
Initial Exam	ABCs and correct any immediate life threats
Detailed Focused Exam	**Vital signs:** Initial blood glucose (documented), BP every10 minutes and adjust to maintain within parameters <180/105 **General Appearance:** LOC, noticeable facial droop, drooling, arm drift **Neuro:** Cincinnati pre-hospital stroke scale (speech, facial symmetry, motor)
Goals of Therapy	Maintain ABCs and adequate vital signs; Maintain BP within parameters
Monitoring	Neuro exam, BP, HR, RR, cardiac monitoring, SpO_2, capnography

PARAMEDIC

- Document current VS; BP parameters stabilized prior to transport
- tPA: Verify total dose given or to be infused. Document total tPA dose to be administered, start and stop times; if tubing change required for EMS IV Pump, assure correct dose of tPA is included. Following tPA administration, begin normal saline infusion at existing rate; No other medications may be administered through tPA infusion line
- Obtain medications in the protocol not stocked on the ambulance from the referring facility
- Administer oxygen 2 – 4 LPM per nasal cannula if SpO2 < 94%. Increase flow and consider non-rebreather mask to keep SpO2 > 94.
- Strict NPO, including oral medications
- Perform and document Cincinnati Stroke Scale every 10 minutes or anytime a change in mentation is noted.
- Document GCS & pupil exam
- Head of bed at 30 degrees
- Continue BP management medications started at sending facility:
    - **Labetalol** drip: may increase 1 – 2 mg/min every 10 minutes to max dose of 8 mg/min, with a maximum total dose of 300 mg, until SBP < 180 and/or DBP < 105. If SBP < 140 or DBP < 80 or HR < 60, discontinue infusion and contact medical control for further orders
    - **Nicardipine** drip: may increase dose by 2.5 mg/hour every 5 min to max dose of 15 mg/hour until SBP < 180 and DBP < 105. If SBP < 140 or DBP < 80 or HR < 60, discontinue infusion and contact medical control for further orders

- **Other**: Discuss with Medical Control and sending facility to assure understanding of all medications to be infused enroute.
- If during transport, SBP > 180 or DBP > 105, consider:
  - **Metoprolol** bolus: 5 mg IV bolus, repeat every 5 min to max of 20 mg. Hold if SBP < 140 or DBP < 80 HR < 60
  - **Hydralazine** bolus: 10 mg IV bolus over 2 min; May repeat in 10 min if no response; max does 20 mg
  - **Labetalol** 10 mg IV over 2 min; If no response after 10 minutes, may repeat once
- **Changes in neurological condition**: *(Develops severe headache, acute hypertension and/or bradycardia, nausea, or vomiting)*
  - Discontinue tPA

Contact Medical Control for the following:

- Adjustment in BP medications
- Orders for antiemetics
- Possible diversion to the closest facility

  - Monitor VS, prehospital stroke scale neuro exam every 10 minutes

- **Oropharyngeal edema**: if signs of angioedema are present: *(Note- occurs more commonly in pts taking ACE Inhibitors)*
  - Stop tPA
  - Refer to *Allergy and Anaphylaxis Guidelines*
  - Monitor airway; consider intubation if persistent swelling
  - Notify Medical Control and receiving facility of changes

Contact receiving facility with update, changes, concerns and ETA

Contact Medical Control for the following:

- Additional Orders
- Acute changes in condition

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