



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 |
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| 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 every 10 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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