

**DEMCA**  
**System Protocols**  
**TISSUE PLASMINOGEN ACTIVATOR (tPA)**

Initial Date:11/1/2021

Revised Date:

Section 9-44

**Purpose:** This protocol applies to Tissue Plasminogen Activator (tPA) drips that are initiated at the transferring facility prior to transport and are not intended to allow ALS-level paramedics to initiate such treatments independently.

**Pharmacology and actions of tPA:** tPA is a thrombolytic formed by aggregation of activated platelets into fibrin meshes by activating plasminogen. tPA is an intravenous medicine given for ischemic stroke.

**Procedure:**

1. Prior to transport, verify that SBP < 180, DBP < 105.
2. If BP above limits, sending hospital should stabilize prior to transport
  - a. Patients will be considered stable when SBP is < 180, DBP < 105 after 3 cycles taken 3-5 minutes apart.
  - b. If unable to stabilize the patient, a critical care unit will be required for transport
3. Perform and record the Cincinnati Stroke Scale as per Stroke Protocols
4. Perform and record GCS
5. Continuous pulse oximetry monitoring, apply oxygen by nasal cannula or mask to maintain O2 sat > 94%
6. Continuous cardiac monitoring.
7. Call medical control if hemodynamically unstable or symptoms due to tachycardia or bradycardia
8. Keep strict NPO including medications
9. Verify total dose and time of IV tPA infusion completed (if dose is completed prior to transfer)
10. If IV tPA dose administration will continue en route, verify estimated time of completion.
11. There should not be any excess tPA, it is calculated and mixed based on the patient's weight. If the bottle becomes empty enroute:
  - a. There is still some tPA left in the tubing which must be infused.
  - b. Remove the IV tubing connector from the tPA bottle and attach it to a newly spiked bag of 0.9% NS
  - c. Re-start the infusion.
12. Monitor and document vital signs and neurological assessment (GCS) q15 minutes
13. For any acute bleeding, worsening of neurologic condition, or if a patient develops severe headache, nausea, or vomiting (suggestive of intracerebral hemorrhage):
  - a. Discontinue tPA infusion (if still being administered)
  - b. Call medical control for further instructions including decision to divert to nearest hospital

MCA Name: DEMCA

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Protocol Source/References:

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