

**Stroke-IV tPA****PURPOSE**

To provide guidance for safe transport of patients who are receiving or have received intravenous tissue plasminogen activator (tPA) for treatment of ischemic stroke

**HISTORY AND PHYSICAL EXAM**

- Perform and Document initial neurologic exam
- Perform and Document vital signs prior to transport. If SBP>180 or DBP >105 discuss treatment of hypertension with sending hospital prior to transport and obtain necessary medications

**KEY POINTS**

- Verify and Document the time of initial IV tPA bolus and time of infusion completion.
- If IV tPA dose administration will continue en route, verify estimated time of completion and amount to be infused. Verify with the sending hospital that any excess tPA has been withdrawn from the tPA bottle and wasted so that the tPA bottle will be empty when the full dose is finished infusing. For example, if the total dose is 70 mg, there would be an extra 30cc in the tPA bottle that has to be withdrawn and wasted since a 100 mg bottle of tPA contains 100cc of fluid when reconstituted.
- At the completion of the tPA infusion, infuse 100cc of NS to flush the remaining tPA from the IV tubing so that the patient receives the full dose of tPA.
- Avoid unnecessary venipuncture or invasive procedures when possible due to increased risk of bleeding in patients receiving tPA
- Do not infuse other medications in the same IV where tPA is infusing
- Do not cycle blood pressure on the same arm where tPA is infusing
- Rarely, patients can have allergic reactions to tPA including but not limited to angioedema. If this happens, treat the patient according to the Allergic Reaction protocol
- If NIH stroke scale is documented at sending facility, note that on the patient's ePCR
- Stroke System: Notate ATCC Number on ePCR in the appropriate field. If patient has not already been entered into the stroke system, call ATCC and enter the patient into the stroke system. At completion of transport, notify ATCC and provide any needed information. If needed, ATCC can assist in obtaining OLMD for these patients.

## Stroke-IV tPA (continued)

TREATMENT	DRUGS/PROCEDURES
<ul style="list-style-type: none"> <li>• Oxygen to maintain pulse oximetry &gt;95%.</li> <li>• Cardiac Monitor</li> <li>• Glucometer. If patient is hypoglycemic, treat using Hypoglycemia Protocol (3.21) It is preferable to use the blood glucose measurement obtained by the transferring hospital in order to avoid unnecessary delay.</li> <li>• Establish or maintain IV access.</li> <li>• Patient must remain NPO (nothing by mouth) including medications</li> <li>• The Paramedic is NOT authorized to give the <i>tPA</i> bolus but IS authorized to maintain the <i>tPA</i> infusion. <i>tPA</i> may only be given if ordered and started at the sending facility.</li> <li>• Monitor and document <u>neurologic exam every 15 minutes</u>. If patient develops worsened neurologic condition or if patient develops severe headache, acute hypertension, difficulty breathing, evidence of allergic reaction, or major bleeding then <u>stop</u> the <i>tPA</i> infusion (if still infusing) and contact OLMD.</li> <li>• Monitor and document <u>vital signs every 15 minutes</u>. If antihypertensive medications (<i>Labetalol</i>, <i>Nicardipine</i>, <i>Metoprolol</i>) are started or ordered at the sending facility, they may be continued for SBP&gt;180 or DBP&gt;105.</li> </ul>	<p><b><u>EMT:</u></b> Not authorized</p>
	<p><b>Advanced:</b> Not authorized</p>
	<p><b>Intermediate:</b> Not authorized</p>
	<p><b>Paramedic:</b></p> <p><i>Oxygen</i></p> <p>Glucometer as needed</p> <p>Establish IV, Cardiac monitoring</p> <p><i>tPA:</i></p> <p>0.9 mg/kg IV; not to exceed 90 mg total dose; administer 10% of the total dose as an initial IV bolus over 1 minute and the remainder infused over 60 minutes</p> <p><i>Labetalol infusion:</i></p> <p>2mg/min and increase by 2 mg/min every 10 minutes to MAX 8 mg/min for goal SBP&lt;180 and/or DBP&lt;105. If SBP&lt;140 or DBP&lt;80 or HR&lt;60, discontinue drip and call OLMD</p> <p><i>Nicardipine infusion:</i></p> <p>2.5 mg/hr and increase by 2.5 mg/hr every 5 minutes to MAX 15 mg/hr until SBP&lt;180 and/or DBP&lt;105. If SBP&lt;140 or DBP&lt;80 or HR&lt;60, discontinue drip and call OLMD</p> <p><i>Metoprolol:</i></p> <p>5 mg IV, may repeat every 5 min to MAX 20 mg. Hold if SBP&lt;140 or DBP&lt;80 or HR&lt;60</p>