

Ischemic Stroke & Alteplase (t-PA)

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Use

Lyse cerebral blood clots within a 4.5 hr onset time frame!

Converts plasminogen to plasmin which then degrades clot.

Dosage

0.9 mg/kg (not to exceed 90 mg), given as an infusion over 1 hour, with 10% given as a bolus over 1 minute

- To help you remember the dose:
 - Head is the **top** of your body
 - Heads are closer to God/Heaven/Some thing in the sky
 - TGH's **top** floor is the **9th**
 - Neuro ICU was on the **9th** floor closer to you know what.
 - Dose is **0.9** mg/kg max dose of 90 mg's

Helpful Hints

- **t-PA reconstituted should always be 1:1 ratio**
 - **1mg/ml (comes packaged with a preservative free sterile water diluent)**
 - **50 mg or 100 mg vials**
- **Bolus dose is 10%**
- **So: 73 kg patient \times 0.9 mg= 65.7 total dose**
 - **10% of 65.7 is 6.57 mg or 6.57 ml's of a 1:1 ratio mix to be given over 1 min. The rest over 1 hour.**

Helpful Hints

If bolus given and infusion started on inter-facility transfer, how do you transfer the rest of the dose to the Alaris pump?

- Do not take the previously hung glass bottle and re-spike with our tubing
- You lose part of the dose in the transfer hospital's tubing
- There is no extra medication to be spared

Helpful Hints

Transferring Medication Steps

- 1) Observe transferring hospital pump to determine how much of the dose and time in the hour is left to infuse the dose.
- 2) Use your 60 ml syringe and 1/2 set to draw the rest of the medication from a port closest to the patient.
- 3) Slow flush the transfer hospital tubing from the same port with 20 ml of NS so that the patient gets the rest of the dose in tubing.
- 4) Take your time and slowly/carefully prime ½ set without wasting medication.
- 5) Start the rest of the medication over the time left.
- 6) If infusion is completed enroute flush IV line tubing with 20 ml NS.

Enroute Assessments

- **LOC: improvements or worsening condition**
- **Abrupt LOC/vomiting**
 - **Think ischemic conversion to hemorrhagic**
 - **Stop medication and treat appropriately**
- **Assess IV site for infiltration often**
- **Assess VS for severe hemorrhage**

Fun Fact's

t-PA time action

Onset: 30 minutes

Peak: 60 minutes

Duration: Unknown

So your patient might show signs of improvement in 30-60 minutes