

Pre and Post tPA Care: Frequently Asked Questions

1. Is written informed consent required prior to giving tPA?

tPA is the standard of care, and currently the only approved agent for acute ischemic stroke treatment. Written informed consent is not required but it is advisable to seek oral expressed consent from the patient or substitute decision maker.

2. When can a urinary catheter be inserted after giving tPA?

If required, urinary catheter to straight drainage **prior** to alteplase infusion. If unable to catheterize patient prior to alteplase infusion, wait **4 hours** after infusion then insert.

3. When can an NG be inserted after giving tPA?

NG can be inserted 4 hours after tPA after infusion.

4. When can a TORBSST be done after giving tPA?

TORBBST can be done immediately following the tPA infusion and repeated as frequently as required thereafter.

5. Can an automatic BP cuff be used to measure blood pressure after giving tPA?

During and after the administration of tPA, blood pressure (BP) must be measured closely and documented as per the post tPA order set: **i.e. Continuous HR monitoring × 24 h**

Record BP/HR q 15 min × 2 h, q 30 min × 6 h and q 1 h × 16 h

Maintaining blood pressure within the target range during and after tPA infusion (< 180/105) is essential for better outcomes. BP monitoring may be completed via automatic BP cuff. Manual BP is only required for BP confirmation.

NOTE: Notify physician immediately if systolic BP greater than 180 or less than 100 and/or diastolic BP greater than 105 on 2 occasions, 5 minutes apart

6. When can antithrombotics be safely started?

Antiplatelet agents (including low-dose ASA, clopidogrel, prasugrel, ticagrelor, ticlopidine, Aggrenox[®], NSAIDS including ketorolac) and anticoagulants both oral (e.g. warfarin, apixaban, dabigatran, rivaroxaban) and injectable (e.g. dalteparin, enoxaparin, fondaparinux, tinzaparin, heparin) should be avoided in the first 24 hours after the alteplase bolus administration. Repeat brain imaging is required 24 hours after infusion.

Antithrombotics may be started after this period if clinically indicated and there is no significant intracranial bleeding on the follow up scan.

7. When can blood be drawn after giving tPA?

Routine bloods should be deferred until 24 hours post tPA. Urgent blood work, on rare occasions may be required within the first 24 hours. Drawing blood early is a clinical decision based on risk benefit. If drawn, apply adequate pressure at the puncture site afterwards. Restrict venipunctures to arm veins. Check puncture site frequently for signs of bleeding. If bleeding occurs apply pressure to the puncture site. If an arterial puncture is necessary, use an upper extremity artery that is accessible to manual compression. Apply pressure for at least 30 minutes and check the site frequently for bleeding thereafter.

8. Can IM injections be given after tPA?

IM injection should be avoided in the first 24 hours after tPA.

9. When can a patient be mobilized after tPA?

Patients should be kept on bedrest for the first 24 hours post infusion then advance activity as tolerated. Early mobilization is associated with better outcomes.

10. What are the signs and symptoms of post tPA bleeding/hemorrhage?

Intracerebral bleeding: Monitor for change in mental status (increased confusion/agitation), decreased alertness, changes in neurologic signs (pupil size, hand grip strength, extremity motion), headache, nausea +/- vomiting or changes in vision.

Gastrointestinal bleeding: Monitor for hematemesis, abdominal pain or tenderness, hypotension, melena, or frank red blood in stool.

Respiratory tract bleeding: Monitor for hemoptysis, respiratory distress, chest pain, hypotension

Genito-Urinary tract bleeding: Monitor for hematuria or dark brown urine, vaginal bleeding

Retroperitoneal bleeding: Monitor for severe back pain, hypotension

Generalised bleeding: Monitor for ecchymosis or petechiae

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