



Tips and Tricks for Reducing CT to Reperfusion Times

Our target in the ESCAPE trial is to have a *picture (CT – first slice of the non-contrast CT done at your center) to puncture* time of 60 minutes. Our target for *picture (CT) to perfusion (1st reperfusion into the MCA territory)* is 90 minutes.

CT to Randomization

- **Pre-notify the stroke team prior to patient arrival** after radio patch in by EMS. To enable the use of past electronic and imaging records, have the EMS provide the name, date of birth and health insurance/hospital number.
- **Ensure that the full team can be assembled** fast especially during off hours.
- If the patient is coming from **another site, you MUST perform a CT & CTA again at your site** and review imaging for eligibility for inclusion.
- If there is a **delay in consent** and a significant time has elapsed, **perform a CT & CTA again** to review if the patient is still eligible for the trial.
- Ensure that you can meet the target of 60 minutes CT to groin puncture prior to randomization.

Picture to Puncture

- **Develop a standard procedure where the angio suite keeps a 'stroke tray' ready** at all times for rapid deployment. Include relevant catheters, devices on the tray.
 - Consider using simple combinations of midazolam (2.5mg IVP) and fentanyl (25 µg IVP) q10-15 minutes for conscious sedation. Alternates include dexmedetomidine.
 - Key principle: keep the BP up above 140 systolic until the artery is open
 - Use the femoral sheath to provide an art line for the anesthetist. Do not take the time to place a radial art line
- Avoid intubation of the patient. Conscious sedation is all that is required. Ideally, an anesthetist is able to manage the conscious sedation. Only 10% or less of acute ischemic stroke patients will require intubation for airway protection of extreme agitation.
- **Begin the procedure immediately.** Do not wait for the full team to arrive. Patient preparation can be done in parallel. Only do essential tasks that are proven to help the procedure and the patient. Anything that can be skipped should be.

Puncture to Recanalization

- **Review the CTA prior to beginning** so that you know the arch and carotid anatomy. Have a plan of attack in your mind before you begin.
- **Choose catheters in advance mentally.** Get team prepared. Have the necessary tools, syringes, wires, catheters immediately available.