Acute Ischemic Stroke Protocol

Patient arrival via EMS/Triage with S/S of Stroke.
Dispatch activates stroke via Pulsara and overhead page.

Emergency Department Assessment
If time of Last Known Well (LKW) < 24 hours, unknown or wake-up stroke, expedite to CT. *(Institutional Goal; 15 minutes read by 25 minutes.)*

- EMS/RN/MD confirm S/S.
- Obtain NIHSS.
- Confirm stability.
- Confirm glucose check > 50 mg/dL.
- MD Order: non-contrast head CT.
- 18 or 20g IV AC.

Negative head CT/Activase Candidate?
Mix tPA and prepare to administer if LKW less than 4.5 hours. *(Institutional Goal; 45 minutes.)*

Proceed with CTA/CTP if NIHSS 4 or greater OR at the discretion of the neurologist.

Positive CTA/CTP; Consider Thrombectomy

Favorable Penumbra

Proceed to IR for emergent thrombectomy.

Unfavorable Penumbra

Not optimal candidate for thrombectomy. May consider on an individual basis.

Iodine (Contrast) Allergy
Emergent Prophylaxis – Methylprednisolone
40 mg IV every four hours until contrast study is complete.

Benadryl
50 mg IV to be given by RN within ONE hour prior to exam.

If anaphylactic reaction, patient to have MRA and stroke protocol MRI. Use GAD for angio.

IMPORTANT
Patient needs CTA with CTP regardless if obtained from referring hospital for evaluation of LVO.

If patient arrives within 60 minutes of outside CTA/CTP, no need to repeat.

TREATMENT SCHEMATIC

1. Symptoms 4.5 hours or less from LKW with NIHSS of 4 or greater or disabling stroke: IV Activase + CTA/CTP. Thrombectomy, if appropriate.

2. Symptoms 4.5 to 9 hours from LKW with NIHSS 4 or greater or disability: CTA/CTP. If core volume less than 70 CC, mismatch 1.2 and absolute difference of at least 10 CC. Thrombectomy, if appropriate.

3. Symptoms > 9 hours LKW with NIHSS > 4 or disability: CTA/CTP. Thrombectomy, if appropriate.

4. Symptoms of unknown onset with NIHSS > 4 or disability – MRI with Flair: Activase if < 1/3 MCA territory.