

Acute Stroke Protocol of Southeastern Ontario
KGH Emergency Guide for Thrombolytic Therapy (IV Thrombolysis) and/or
Endovascular Thrombectomy (EVT)

| Inclusion Criteria for TNK or rt-PA | Exclusion Criteria for TNK or rt-PA |
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| <ol style="list-style-type: none"> Patient suspected of having ischemic stroke Deficit should be of a severity that would lead to significant compromise in patient's quality of life Deficit should be relatively stable during period of observation Clear and credible time of stroke onset can be established, and patient can receive IV thrombolysis within 4.5 hours. Time of onset is time patient was last seen well Pregnancy is NOT a contraindication Age <18 years is NOT a contraindication If a child presents with stroke symptoms, Neurology-Stroke Service + Paediatric Intensive Care Service to jointly decide on next steps (e.g., consider contacting The Hospital for Sick Children in Toronto) | <ol style="list-style-type: none"> Major surgery during previous 2 weeks Major cerebral infarct or head/spinal injury in past 3 months A known source of recent bleeding Puncture of non-compressible artery or biopsy site within 7 days, including lumbar puncture Blood pressure remains at systolic > 185 and/or diastolic > 110 despite treatment Serious co-morbidity (e.g., advanced cancer, renal failure, hepatic failure) that would increase bleeding risk or limit effectiveness of treatment Coma during current event <ul style="list-style-type: none"> ▪ INR > 1.7; ▪ Increased PTT; ▪ Platelet Count < 100,000; or ▪ Direct Oral Anticoagulants taken within 24 hours *Caution if Warfarin taken within 48 hours Blood glucose <2.7 or >22.2 mmol/L Rapidly resolving neurologic signs |
| Inclusion Criteria for EVT | Exclusion Criteria for EVT |
| <ol style="list-style-type: none"> Presenting < 6 hours from stroke onset <ul style="list-style-type: none"> ▪ Highly selected patients presenting between 6-24 hours based on clinical & imaging criteria NIH Stroke Scale (NIHSS) greater than 5 Pre-stroke functioning independently in activities of daily living in their community Age 18 yrs or greater (if < 18 yrs see #6 above) | <ol style="list-style-type: none"> Complete resolution of neurological signs (TIA) Serious co-morbidity with limited lifespan (e.g., advanced cancer, advanced dementia) Recent Intracranial bleed Severe contrast allergy or absolute contraindication to Iodinated Contrast Difficult femoral, radial or brachial artery access Fibromuscular Dysplasia (relative contraindication) |

Thrombolytic Therapy and/or EVT Checklist (See Inside Acute Stroke Protocol Package for more Details)

- Draw bloodwork: CBC, PT, PTT, INR, electrolytes, BUN, Creatinine, Glucose, Troponin, Type and Hold 2 units, and βHCG (pregnancy test) if indicated
- Establish 2 IVs. Secondary IV should be started with 18-gauge needle in right antecubital fossa unless contraindicated
- Establish continuous ECG and O2 saturation monitoring
- Transport to CT Suite for non-contrast head CT + CT Angiography (CTA) + RAPID CT Perfusion (CTP); Take stretcher, monitor, transport kit, TNK or rt-PA, & stroke medication kit to CT. If directed to take rt-PA, bring IV pump
- Neurologist obtains consent from patient, or where necessary an appropriate family member
- Consider urinary foley catheter **only if** known that patient is candidate for EVT after CTA/CTP is done
- Determine patient's weight for TNK or rt-PA
- Treat Blood Pressure systolic > 185 and/or diastolic > 110 with IV Labetolol or IV Hydralazine as per Appendix A of Guidelines for the Use of IV Thrombolysis /EVT in Acute Stroke Protocol package
- See inside Acute Stroke Protocol package for IV TNK or rt-PA administration guideline
- Monitor CNS and blood pressure q 15min during & post IV thrombolysis /EVT for 2 hours
- Monitor for Angioedema and treat as per Appendix C of Guidelines for the Use of IV thrombolysis/EVT
- Keep patient NPO