

**Acute Stroke Protocol of Southeastern Ontario**  
**KGH Emergency Guide for Thrombolytic Therapy (rt-PA) and/or Endovascular Thrombectomy (EVT)**

Inclusion Criteria for rt-PA	Exclusion Criteria for rt-PA
<ol style="list-style-type: none"> <li>1. Patient suspected of having ischemic stroke</li> <li>2. Deficit should be of a severity that would lead to significant compromise in patient's quality of life</li> <li>3. Deficit should be relatively stable during period of observation</li> <li>4. Clear and credible time of stroke onset can be established, and patient can receive rt-PA within 4.5 hours. Time of onset is time patient was last seen well</li> <li>5. Pregnancy is <b>NOT</b> a contraindication</li> <li>6. Age &lt;18 years is <b>NOT</b> a contraindication</li> </ol>	<ol style="list-style-type: none"> <li>1. Major surgery during previous 2 weeks</li> <li>2. Major cerebral infarct or head/spinal injury in past 3 months</li> <li>3. A known source of recent bleeding</li> <li>4. Puncture of non-compressible artery or biopsy site within 7 days, including lumbar puncture</li> <li>5. Blood pressure remains at systolic &gt; 185 and/or diastolic &gt; 110 despite treatment</li> <li>6. Serious co-morbidity (e.g., advanced cancer, renal failure, hepatic failure) that would increase bleeding risk or limit effectiveness of treatment</li> <li>7. Coma during current event</li> <li>8. •INR &gt; 1.7; •Increased PTT; •Platelet Count &lt; 100,000; or •Direct Oral Anticoagulants taken within 24 hours *Caution if Warfarin taken within 48 hours</li> <li>9. Blood glucose &lt;2.7 or &gt;22.2 mmol/L</li> <li>10. Rapidly resolving neurologic signs</li> </ol>
Inclusion Criteria for EVT	Exclusion Criteria for EVT
<ol style="list-style-type: none"> <li>1. Presenting &lt; 6 hours from stroke onset <ul style="list-style-type: none"> <li>▪ Highly selected patients presenting between 6-24 hours based on clinical &amp; imaging criteria</li> </ul> </li> <li>2. NIH Stroke Scale (NIHSS) greater than 5</li> <li>3. Pre-stroke functioning independently in activities of daily living in their community</li> <li>4. Age 18 years or greater</li> </ol>	<ol style="list-style-type: none"> <li>1. Complete resolution of neurological signs (TIA)</li> <li>2. Serious co-morbidity with limited lifespan (e.g., advanced cancer, advanced dementia)</li> <li>3. Recent Intracranial bleed</li> <li>4. Severe contrast allergy or absolute contraindication to Iodinated Contrast</li> <li>5. Difficult femoral artery access</li> <li>6. Fibromuscular Dysplasia (relative contraindication)</li> </ol>

**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  $\beta$ HCG (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 O<sub>2</sub> saturation monitoring
- Transport to CT Suite for non-contrast head CT + multiphase CT Angiography (CTA); Take stretcher, monitor, IV pump, transport kit, and rt-PA to CT
- 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 is done
- Determine patient's weight for 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 rt-PA/EVT in Acute Stroke Protocol package
- See inside Acute Stroke Protocol package for IV rt-PA administration guidelines
- Monitor CNS and blood pressure q 15min during & post rt-PA/EVT for 2 hours
- Monitor for Angioedema and treat as per Appendix C of Guidelines for the Use of rt-PA/EVT
- Keep patient NPO