CANADIAN STROKE BEST PRACTICE RECOMMENDATIONS

Acute Stroke Management
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Box 5C: Inclusion Criteria for Endovascular Thrombectomy

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Box 5C  Inclusion Criteria for Endovascular Thrombectomy

Refer to Section 4.2 and Boxes 4B and 4C for detailed recommendations on neuroimaging-based selection criteria.

Patients should be considered eligible for endovascular thrombectomy if they fulfill the following clinical criteria:

1. Diagnosed with an acute ischemic stroke.
2. The stroke is disabling (i.e., significantly impacting function), usually defined as National Institutes of Health Stroke Scale (NIHSS)>4.
3. There is a proven, clinically relevant (symptomatic), intra- or extracranial acute arterial occlusion that is amenable to endovascular intervention.
4. The risks and benefits of endovascular thrombectomy are within the patient’s goals of care and take into consideration their functional status prior to stroke.
5. Age ≥18 years. (Refer to pediatric guidelines for treatment <18 years of age).
   a. Currently, there is no evidence for EVT in pediatric populations and the decision to treat should be based on the potential benefits and risks of the therapy, made by a physician with pediatric stroke expertise in consultation with the EVT provider and the patient and/or family or substitute decision-makers.
6. Intravenous thrombolysis: If intravenous thrombolysis is given in conjunction with endovascular thrombectomy, refer to Box 5B for additional inclusion criteria.
7. Premorbid condition criteria: In general, individuals considered eligible for EVT are those who were deemed functionally independent before their index stroke (i.e., mRS <3) and have a life expectancy >3 months. Note: These criteria are based on major clinical trial inclusion criteria. Decisions should be based on these factors, clinical judgement, and the patient’s goals of care.
8. Imaging: Patients must qualify for imaging criteria in early and late windows as described in Boxes 4B and 4C.
9. Time to treatment: The decision to proceed with EVT should be shared by the physician with clinical stroke expertise and the neuro-interventionalist, who will use the available imaging information as is indicated.
   a. Specifically:
      i. Patients should have immediate neurovascular imaging (see above) to determine eligibility. Patients can be considered for imaging within a 24-hour window from stroke symptom onset or last known well.
      ii. For patients presenting <6 hours from stroke symptom onset or last known well to initiation of treatment (i.e., arterial puncture), all patients who meet eligibility criteria should be treated.
      iii. For patients presenting between 6 and 24 hours from last known well, selected patients may be treated if they meet clinical and imaging criteria and based on local protocols and available expertise in EVT.