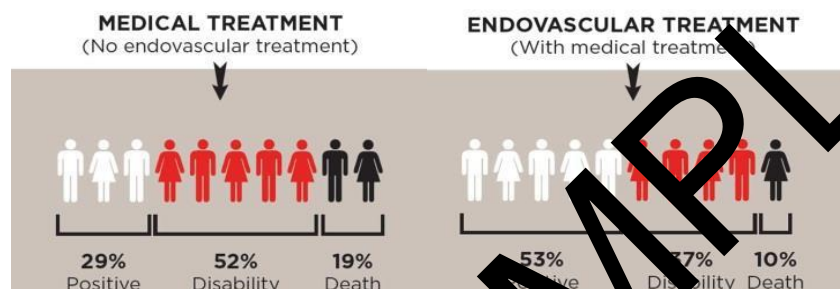


## Stroke Endovascular Thrombectomy KGH Pilot Study: Communiqué

As a Regional Stroke Centre, KGH delivers tertiary level evidence-based stroke care. The current standard of IV tissue plasminogen activator (tPA) treatment is effective for many patients presenting with an acute ischemic stroke. Given new evidence, KGH has approved a Pilot Project to deliver **Endovascular Thrombectomy (EVT) using mechanical clot retrieval for patients with an acute ischemic stroke that meet specific selection criteria**. This new treatment can be given with or without IV tPA.

Five landmark trials were released in 2015 supporting strong evidence for endovascular mechanical clot retrieval (thrombectomy) in hyperacute stroke care. The evidence supports significant improvement in functional outcomes and reduced mortality for select patients that otherwise might respond poorly to IV thrombolysis. Selection criteria include patients with large proximal clots and adequate collateral circulation evident on imaging. These trials have led to the identification of this treatment as a new standard of hyperacute stroke care in the July 2015 update of the Canadian Best Practice Recommendations for Stroke Care (Heart and Stroke Canada).

One landmark trial, the ESCAPE trial, demonstrated improved outcomes in select cases (Figure 1):



M. Hill (ESCAPE) 2015 Figure 1

**Time is brain.** The potential to save brain tissue is highly time dependent necessitating a coordinated response with an extremely well designed process. Those with implementation experience from the study trials highlight the use of clear protocol as a key to success.

### EVT Pilot Study at KGH to Begin May 2016

KGH will begin a pilot study with 10 patients that meet the ESCAPE trial selection criteria beginning May 2, 2016. To begin with, the treatment will be administered during weekday hours only (Monday-Friday: 0800-1600h). The learning from completion of the 10 cases will inform future planning.

### What is Involved?

EVT consists of arterial catheterization and mechanical removal of large clots occluding a vessel in the brain thus directly promoting reperfusion by recanalization of the artery. This treatment is provided with or without IV tPA. EVT involves a catheter and retrievable stent being inserted into the femoral artery through to the intracranial occlusion. The clot is then pulled out via the retrievable stent device. EVT is an “awake” or conscious sedation procedure performed in the Interventional Radiology (IVR) suite.



Endovascular Mechanical Clot Retrieval retrieved from [www.dicardiology.com](http://www.dicardiology.com)



