# Endovascular Thrombectomy (EVT) Drip and Ship Transfer Protocol

December 6, 2016

**Preparation:**

1. Ensure STAT blood work results are sent to KGH if available (CBC, Lytes, Urea, Creatinine, INR, PTT, glucose, troponin, BHCG if female patient less than 50 years). Can be faxed post patient transfer (KGH ED FAX: 613-548-2420).
2. If not already started, insert 1 IV of 0.9% NaCl at 75cc/hr & insert 1 Saline Lock preferably with an 18 Gauge needle in the right ACF-if unable, use 20 gauge, second can be in left ACF *must be above the hand. If pre renal, IV 0.9% NaCl at 100cc/hr.
3. If available, ensure stroke symptom onset, first slice of CT, & multiphase CTA completion times are documented.
4. Prior to tPA, insert foley catheter.
5. Administer tPA as per QHC protocol.
6. Remove clothes prior to transfer if possible. Ensure clothes go with the patient.
7. Request 1 family member to accompany EMS if possible. Obtain contact number for family members.
8. Fax QHC ED Face Sheet to KGH ED: 613-548-2420 to allow for patient registration.

**Pre & During Transfer Guidelines:**

9. Keep patient NPO.
10. Continuous Cardiac Monitoring. Patch MRP at sending hospital if hemodynamically unstable or symptoms due to arrhythmia such as tachycardia or bradycardia.
11. Continuous pulse oximetry. Apply oxygen by nasal cannula or mask to maintain $S_pO_2$ greater than 92%. Patients with known chronically elevated $PaCO_2$, titrate $O_2$ to achieve a target $S_pO_2$ between 88 to 92%.
12. Vital signs q15 mins and prn.
13. Neuro-vital signs q 15minutes (Canadian Neurological Scale is recommended).
    - If sudden neurological deterioration, patch MRP at sending hospital.
14. For any sudden respiratory compromise (e.g., stridor) stop IV tPA infusion and patch MRP at sending hospital.

**Blood Pressure Monitoring and Treatment:**

15. Monitor Blood Pressure for a target SBP less than 180 mmHg and DBP less than 105 mmHg.
    If BP exceeds target after 2 measurements taken 5 minutes apart, give:
    - Labetalol 10 mg IV over 2 min. Repeat q10 - 20 mins PRN until target met (max 150 mg labetalol).
      *(NOTE: labetalol contraindicated if HR <50 beats/minute, 2nd or 3rd degree heart block, asthma).*
    - Monitor BP q 15 min or more frequently during initial treatment.
    - If target not achieved despite labetolol (either maximum dose or HR< 50 beats/minute), patch MRP at sending hospital.
16. **Hypotension:** If SBP less than 110 mmHg after 2 measurements taken 5 minutes apart, administer bolus of 500cc 0.9% NaCl. If SBP remains less than 110 mmHg, patch MRP at sending hospital.

**Angioedema Monitoring and Treatment after tPA:**

17. Observe & document state of tongue/oropharynx at 30 mins, 45 mins, 60 mins & 75 minutes after onset of IV tPA.
    - If facial, tongue and/or pharyngeal angioedema:

- STOP infusion and patch MRP from sending hospital
- Begin Angioedema Treatment:
  - Give diphenhydrAMINE 50 mg IV over 1-2 minutes
  - Give ranitidine 50 mg in 50mL NS IV over 15 minutes
  - If severe, also give hydrocortisone 100mg IV over at least 30 seconds

**IV Contrast Media Allergy Treatment:**

**18.** If patient developed signs and symptoms of contrast allergy reaction, patch MRP from sending hospital and begin treatment if not previously given as per above (see Angioedema Treatment):
  - Give diphenhydrAMINE 50 mg IV over 1-2 minutes
  - Give ranitidine 50 mg in 50mL NS IV over 15 minutes
  - If severe, also give hydrocortisone 100mg IV over at least 30 seconds

**Systemic Bleeding Monitoring:**

**19.** Check puncture sites for bleeding or hematoma.
**20.** Apply pressure & dressings to active bleeding sites.
**21.** Evaluate urine, stool, emesis or other secretions for blood.
**22.** If systemic bleeding cannot be managed, patch MRP at sending facility.

**Nausea Treatment:**

**23.** dimenhyDRINATE 12.5-50 mg IV x 1 dose PRN. (start with lower dose if elderly/frail).
**24.** Patch MRP at sending hospital if nausea or vomiting.

**Contact Receiving Hospital:**

**25.** If patient develops worsening of condition, contact receiving hospital ED with an update and ETA (KGH ED Charge Nurse-613-549-6666 extension 7003).