Brockville General Hospital

LLG Integrated Stroke Project News Sept 2016

Perth and Smiths Falls District Hospital

Congratulations to all those involved in launching Integrated Stroke Care in the Lanark, Leeds and Grenville (LLG) area. As of Aug 31st there have been 21 patients admitted to Brockville General Hospital (BGH) from the Perth and Smiths Falls District Hospital (PSFDH) since the launch on May 2, 2016. These patients are directly admitted to the Acute Stroke Unit on 1East at BGH.

Featured in this update: FAQ for Physicians

What determines if a patient goes to KGH vs BGH from a PSFDH ED?
PSFDH physicians should first check eligibility for Acute Stroke Protocol transfer to KGH (see Pink Stroke Poster posted in all EDs and inpatient units). Patients should be transferred to the BGH acute stroke unit if they are not eligible for transfer to KGH but patient require admission for their stroke/high risk TIA.

Acute Stroke Protocol of Southeastern Ontario 25/07/2014

Emergency Transfer Guide for Thrombolytic (rt-PA) Therapy

Patients who present with features of an acute ischemic stroke may be eligible for thrombolytic therapy at Kingston General Hospital.

Inclusion Criteria

1. Patient is suspected of having an ischemic stroke.
2. A clear and credible time of onset can be established and the patient can reach KGH within 3.5 hours of onset*. Time of onset is the time the patient was last seen normal. **Stroke on awakening cannot be considered.**
   *The KGH Stroke team requires 1 hour from ED door to treatment.
3. The deficit should be relatively stable over the period of observation.
4. Patient is in good health with limited pre-morbidity.
5. The deficit should be of a severity that, should it persist, would lead to a significant compromise in the patient's quality of life.
6. Pregnancy is **NOT** a contraindication.
7. Age < 18 years is **NOT** a contraindication.

Exclusion Criteria

1. Unknown onset of symptoms or patient last seen well > 4.5 hours.
2. Rapidly improving neurological signs (TIA).
3. Definite seizure during current event.
4. Coma during current event.
5. Stroke or head injury in past 3 months.
6. Major surgery past 2 weeks.
7. Serious bleeding past 3 weeks (e.g., GI Bleed).
8. •INR > 1.7;
   •Increased PTT; or
   •Platelet Count < 100,000.

   Dabigatran (Pradax), Rivaroxaban (Xarelto) and Apixaban (Eliquis) taken within last 5 days: contact KGH switchboard and ask to speak to the physician on call for stroke patients.
   * Caution if Warfarin taken within 48 hours prior to onset of stroke
9. Serious co-morbidity (e.g., advanced cancer, renal failure, hepatic failure) that would increase bleeding risk or limit effectiveness of outcome.

The following steps are recommended if the patient meets eligibility criteria and is stable for transfer:

Step 1 Arrange for ambulance transfer by calling dispatch.
Inform the dispatcher that patient fits "**Acute Stroke Protocol**"

Step 2 Call KGH Emergency Department. Ask to speak to the Charge Nurse and inform them you have a patient that meets the "**Acute Stroke Protocol**"

Phone (613) 549-6666 extension 7003

Step 3 The KGH Stroke Team will require the following **(never delay transfer to complete):**
- Patient changed into a gown (if possible)
- 1 IV (no glucose solutions unless required)
- 1 saline lock started with an 18 gauge needle in the right antecubital fossa* unless contraindicated
- ECG
- CBC, electrolytes, urea, creatinine, troponin, INR, PTT, glucose, pregnancy test (βHCG) if indicated

It is **recommended** the patient be transferred with:
- Ambulance Cardiac Monitor
- Oxygen Therapy

* The right antecubital fossa has proven to be the most effective IV site for the delivery of the contrast medium when specialized imaging is required.

Step 4 Fax blood work and all relevant patient information to KGH Emergency Department:

Fax (613) 548-2420

Should patients receive a CT scan prior to transfer to BGH?
Yes, unless it is after hours when the Smiths Falls CT scanner is not available (i.e. after 11 pm on weekdays or after 9 pm on weekends/holidays). The CT scan will help determine if there is a need to transfer to KGH for potential neurosurgery instead of BGH and save the patient time and additional transfers. This will also help to prevent unnecessary transfers to BGH for TIA patients that do not require admission. If the Smiths Falls CT scanner is not available, physicians will use their judgement to determine the best timely course of action. This can be discussed with the neurologist on call for stroke at KGH or consulting physicians at BGH as appropriate. Ideally, patients requiring admission should be transferred to the stroke unit within 6 hours of ED arrival.

What are the key factors for determining admission of High Risk TIA patients?
There are many factors that influence the decision to a) admit to a stroke unit in Brockville or KGH, b) be discharged from the ED straight home or c) be repatriated back to the local ED for ongoing medical follow up. There are many clinical factors that could contribute to decision-making. High risk TIA, those with fluctuating or persistent symptoms may need admission to a stroke unit (BGH or KGH). Sometimes, what initially appears to be stroke-related may not in fact be a stroke or TIA and may need to be discharged back to the local ED for further medical assessment and follow-up. If clinical symptoms resolve fully, TIA diagnostics and initial management are completed in the ED, the patient may be discharged home with follow up referral to the local Stroke Prevention Clinic/Vascular Protection Clinic. Some key factors are a) whether the symptoms/signs have fully resolved upon a complete neuro exam, b) whether symptoms are fluctuating and c) whether there are other non-stroke medical concerns that need attention.

When do BGH physicians contact Dr. Stolee at PSFDH?
Dr. Kate Stolee, Physiatrist for Stroke Rehab in Perth, only needs to be contacted if the team feels the patient has rehabilitation potential for transfer directly to rehabilitation or may become rehabilitation-ready. Ideally, this conversation should occur around Day 3 or Day 4 once the Alpha FIM® is completed and the allied team has assessed the patient. The Alpha FIM® is a tool used in assessing rehab candidacy however, other factors are also considered. Dr Stolee notes that if there is any doubt as to rehabilitation candidacy, it helps to have a conversation so please contact her in order to be as inclusive as possible. If there is no anticipated need for inpatient rehabilitation, there is no need to contact Dr. Stolee.

What is the AlphaFIM® Instrument?

- Standardized assessment tool
- Measures disability/functional status
- Completed by allied health at BGH on Day 3 post admission
- Scores close to 40-80 should be considered for inpatient stroke rehabilitation; however some scoring outside this range may also be good rehab candidates.

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How do BGH physicians know who the MRP is for transfer back to PSFDH?
To initiate a repatriation back to PSFDH, the standard SE LHIN transfer form needs to be completed and communication regarding the patient will occur between patient flow departments. The PSF patient flow coordinator will help in identifying an MRP and transfer date based on bed availability.

In Perth and Smiths Falls – patients who have family physicians with admitting privileges will generally be followed by their family physician in hospital as the MRP. However, for patients where this does not apply, there is a hospitalist at the Smiths Falls site and a daily assignment for unattached patients at the Perth site. Depending on the day of transfer, site of transfer etc – the MRP will vary.

When does the physician need to hand off to the MRP in PSFDH?
The hand-off should occur on the day of transfer. If it is unclear who the MRP is – the admitting department in PSFDH can be contacted via switchboard and will always know the MRP assigned at each site on a given day.

When should patients stay in Brockville ASU for acute care vs transferring back to PSFDH?
The 5-day ischemic stroke/high risk TIA clinical pathway is not written in stone – it is a guideline. Some patients will be medically stable and have had their stroke-related issues managed sooner while some will need a longer stay. The acute stroke unit length of stay is based on the patient's clinical needs. If medical issues are related to stroke, the patient should stay at BGH. If there are ongoing medical issues that are unrelated to stroke but require ongoing acute care, then they may transfer back to PSFDH for further acute medical management and care close to home.

If referring a patient to Vascular Surgery at KGH, what vascular imaging should be performed?
Regardless of the degree of stenosis, any patient referred to vascular surgery for carotid intervention should have CTA results available before seeing the surgeon.

Patient and Family Resources: *Please see the Acute Stroke Unit video on the BGH website (patient services section) to learn more from stroke survivors about their experience of stroke units, how much it means to them and to their families. Please share this video link and the acute stroke unit brochure with your patients and families. Brochures are available in hard copy in the PSFDH ED departments, as well as on the Acute Stroke Unit in Brockville General Hospital. Patient/Family surveys for the Acute Stroke Unit at BGH and Rehab Sites at both BGH and PSFDH are being distributed and will inform ongoing evaluation and quality improvement work.*

Thank you for your part in providing excellent stroke care.

If you have questions/feedback about processes, please discuss these with the hospital unit manager.

KEY contact numbers BGH

One East Stroke Unit 613-345-5649 x 1150

1E Charge Nurse Portable Phone 613-345-5649 x 1756

One East Nursing Station Fax 613-345-8301

KEY contact numbers PSFDH

Switchboard at PSFDH 613-267-1500 – press 0

Dr Stolee's office for rehab consults 613-267-6777