FALL 2013

TRAUMA NEWSLETTER

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SPECIAL POINTS OF INTEREST:

- P.A.R.T.Y.
- Geriatric Trauma
- New education dates

TOH TRAUMA SERVICES UPDATE

CODE BLEED

Traditionally, a patient in traumatic hypovolemic shock was given many litres of crystalloid solution in order to maintain a "normal blood pressure". Research has shown that this approach dilutes the oxygen carrying capacity and coagulation capability of the patient's remaining blood. Early resuscitation with blood products, rather than normal saline or ringer's lactate, has led to better outcomes. This year The Ottawa Hospital updated the massive transfusion protocol which is particularly efficient in the trauma setting. Based on the Trauma Team's assessment a "**Code Bleed**" is called early in the resuscitation if the patient is hemodynamically unstable due to blood loss. This triggers the transfusion medicine department to prepare the first in the following three step cascade of blood products for rapid delivery to the patient:

Step 1: 4 units of packed red blood cells (PRBC) and 2 units of plasma.

These uncrossmatched products are given through a Level 1 Rapid Infuser which warms them to prevent hypothermia. Once a blood sample is obtained, and the Trauma Team feels additional transfusion is needed, the next steps can be crossmatched to the patient.

Step 2: 6 PRBC and 4 Plasma.

Step 3: 10 units Cryoprecipitate, 6 PRBC, 4 Plasma, 1 Platelet.

This protocol provides rapid treatment of hypovolemic shock due to blood loss and enhances the quality of care provided to our trauma patients.

Article written by
Betty Clark
Trauma Coordinator
Trauma Services, TOH

CHEO TRAUMA PROGRAM UPDATE

The CHEO Trauma Program is presently working with TOH and OPS in developing a dynamic **highly skilled** Pediatric and Adult Trauma simulations, intubation skills, extrication, c-spine guidelines and many more for the 12th Annual Eastern Ontario Regional Trauma Conference. This year the Conference is CME approved and will offer 6.25 hours with the approval of ENAO recognition. We hope to see you there.

CHEO is developing some exciting new opportunities to enhance their trauma education through their new Trauma Nurse Training program as well as through their simulation education offered to all staff members. This year Cheo Trauma Program will be taking part in the Aztracc Simulcast held at Cheo November 7 and 8th, 2013. This will be presented at Cheo and is CME approved. This dynamic opportunity is offered to us through the University of Arizona.

The Cheo trauma program continues to partner with Thinkfirst, a national non-profit organization dedicated to prevention of brain and spinal cord injuries which has joined Safekids Canada, Smartrisk and Safe Communities Canada to form one national organization named Parachute. Thinkfirst works in collaboration with the community advocating and educating for the reduction of injuries through helmet use and safety sporting activities. More information and injury prevention resources may be found at http://www.parachutecanada.org/

Cheo continues to help be a part of the education process of the dangers of drinking and driving through having an active role with the P.A.R.T.Y. program ran through TOH with the Injury Prevention Coordinator B.Mews, RN.

Fall is coming soon, what a great time for families to enjoy bike riding. We encourage all family members to wear bike helmets.

Wearing a helmet can prevent 70-90% of head injuries. They can have life changing impacts on the lives of children, youth and families.

For further information on bicycle safety please see Cheo's website at http://www.cheo.on.ca/en/helmet-safety

Have a safe fall.

Article written by:
Kerri-Lynn Whyte
Trauma Coordinator
Trauma Program, CHEO

Attention RN's!

P.A.R.T.Y. needs you!!

We are starting another year of P.A.R.T.Y.

(Prevent Alcohol Risk Related Trauma in Youth)
and we are looking for you!!!

If you have an interest in expanding your skills and teaching injury prevention to groups of healthy vibrant youth please call me.

Every Thursday morning of the school year you will see us making our way to the ER department in hopes to see the Trauma bay.

We will meet our multidisciplinary team who work together to present stories and simulation with the goal of increasing our youth's knowledge of the potential consequences of making poor choices.

The RN's role in this day is a vital one.
Please help us make a difference.

PREVENT Alcohol and Risk-Related Trauma in Youth Ottawa

Contact:

For more details
contact Barb Mews
at ext 19602
or email her
at bmews@toh.on.ca

CHEO ED Outreach Program Education Day For Physicians, Nurses & Allied Health 0800H – 1500H

Updates on common pediatric ED illnesses (asthma, bronchiolitis, croup, gastroenteritis) as well as pediatric DKA, enhanced with a session on the use of associated Outreach documents (critical pathways, preprinted orders) and other pediatric resources available on the Outreach website

High Fidelity Pediatric Mock Codes Simulation Training & RN Skills Station

Topics for Elective Sessions:
Concussion/Minor Head Injury
Fever Without a Source
Hyperbilirubinemia
Orthopedics
Procedural Sedation

The Outreach Team:
Dr. Andrea Losier, Outreach Educator
Dr. Sarah Reid, Outreach Educator
Danica Irwin, ED Pharmacist
Dr. Ahmed Nasr, Trauma Program Director
Kerri-Lynn Whyte, RN, Trauma & Injury Prevention Co-ordinator
Christina Toppozini, RN, Simulation Educator
Eleanor Holmgren, RN, Outreach Educator

For more information on the course, cost and the dates available please contact:

Louise Lafleur at 613-737-7600 ext. 2285 or lafleur@cheo.on.ca

CHEO

INJURY IN OLDER ADULTS: CONSIDERATIONS IN GERIATRIC TRAUMA

Adults over the age of 65 represent the fastest growing population in Canada,[1] with many of these individuals remaining physically active and engaging in activates that put them at risk of injury. In addition, the normal physiological changes associated with aging such as decreased visual acuity, reduced muscle mass, and changes to balance and reflexes further increase the risk of sustaining an injury. The result is that older adults represent a significant number of injuries that require treatment in the Emergency Department (ED) every year. As older adults frequently live with multiple comorbidities, their care needs may be very complex.[2] With the rapidly rising number of people in this age group, this becomes a significant issue to address in terms of injury prevention, acute care management and proactive approach to community supports for those discharged home to the community.

In 2012 – 2013 those aged 65+ represented 46% of all major trauma cases seen by the Regional Trauma Program of Eastern Ontario, with 84% of these cases resulting from a fall.[3] While the cost and repercussion of these major trauma patients is staggering, in reality these cases are just the tip of the iceberg… many more patients in this age group present to the ED with more minor injuries.[4] However even with minor injuries, these patients are at much greater risk of a negative outcome related to their injury than younger patients who sustained the same injury. Therefore the provision of age-appropriate care in the ED setting is imperative to in order to prevent functional decline, increased risk of re-injury and rebound ED visits or hospital admissions.

When managing major trauma patients, aggressive resuscitation and early transport to the Trauma centre is the key to ensuring the best long-term survival and functional outcomes.[5,6] The Trauma Nursing Core Course (TNCC), as well as the Advanced Trauma Life Support (ATLS) programs both provide specific age-related considerations to initial resuscitation of this population. Of importance is the notion that what may seem like a more minor injury in a younger patient may in fact have more significant implications in an older adult with multiple chronic illnesses and frailty, resulting in the need to a more proactive approach to stabilizing these patients.

So what can you do?

Get trained.

Take ATLS, TNCC or the Advanced Trauma Care for Nurses program to build your knowledge and understanding of the age- specific considerations related to the assessment of traumatic injury in older adults.

Screen for risk.

- When assessing older adults, consider these flags for increased risk of poor outcomes:
  - Increased age
  - Multiple ED visits in the past 6 months
  - Recent hospitalizations or acute illness
  - History of cognitive impairment
  - Visual or hearing impairment
  - Living alone with minimal support
  - Multiple medications

Think Prevention.

- The best approach is to prevent the injury from happening. Here is an example of strategies to consider to prevent falls:
  - Regular physical activity and exercise improves muscle strength, coordination, & balance;
  - Use of appropriate assistive devices helps older adults to safely continue with their activities of daily living & promotes physical activity
  - Teach patients and families about creating a safe home environment that may include suggestions such as safety bars in the bathroom, removal of scatter rugs, proper lighting, or a referral for a home safety assessment
  - Medication review to monitor side effects & compliance. Consider new prescriptions, use of over-the-counter medications, natural remedies, as well as alcohol & illicit drug use.
  - Adequate management of pain is imperative for sleep, physical activity & prevention of depression

Get help.

If you are considering discharge from the hospital, involve any key supports available in your department to help assess and manage these patients. Geriatric Emergency Management nurses, Social Workers, Physiotherapy or CCAC Care Coordinators may provide assistance with assessment and planning for a safe and sustainable discharge.

References:

Statistics Canada. *The Canadian Population in 2011: Age and Sex*. (Government of Canada catalogue no. 98-311-X2011001). Ottawa, Canada; 2011.

Hwang U & Morrison RS. The geriatric emergency department. *J Am Geriatr Soc,* 2007;55:1873 – 1876.

The Regional Trauma Program of Eastern Ontario. *Major Trauma 2012 – 2013*.

Ontario Injury Prevention Resource Centre. *Injuries Among Seniors in Ontario: A Descriptive Analysis of Emergency Department and Hospitalization Data*. Toronto, Canada; 2007.

American College of Surgeons. *Advanced Trauma Life Support Student Course Manual* (9th ed.). Chicago, IL; 2012.

Emergency Nurses' Association. *Trauma Nursing Core Course Provider Manual* (6th ed.). Des Plaines, IL; 2007.

Article written by:
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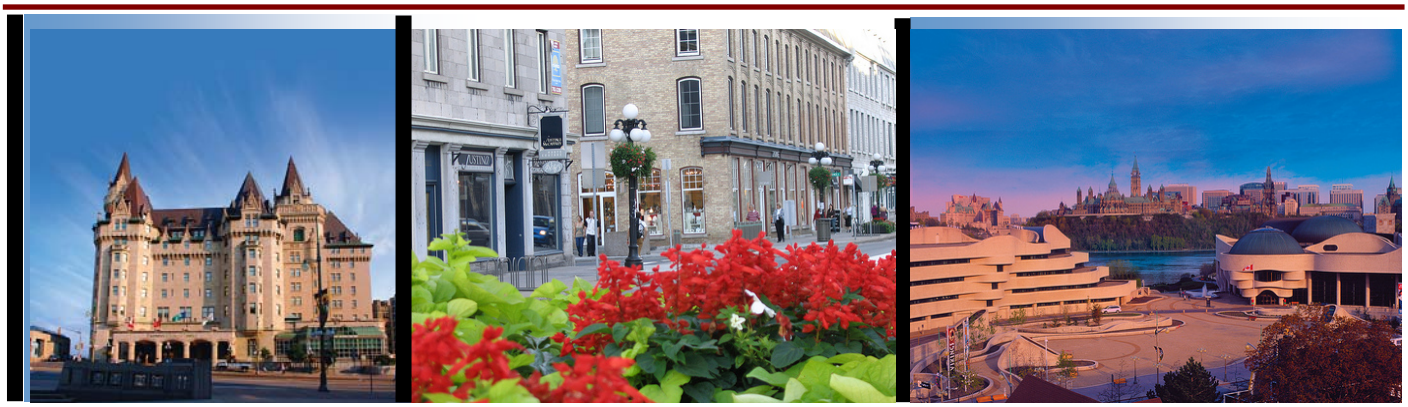
Advanced Practice Nurse
Geriatric Emergency Management
The Ottawa Hospital &
The Regional Geriatric Program
of Eastern Ontario



Photos courtesy of Ottawa Tourism

EDUCATIONAL OPPORTUNITIES - IN ALPHABETICAL ORDER

2013-2014 Schedule

ATCN (TOH)	Feb 20-22,2014	Planning phase
ATLS Provider (TOH)	Oct 17-19 (full), Nov 21-23 (full) Feb 20-22 (full), Apr 10-12	Contact course coordinator for availability
ATLS re-cert (TOH)	Nov 23 (10h-15h), 2013, Apr 12 (10h to 15h), 2014	Contact course coordinator for availability
PALS (CHEO)	Oct 3-4, 2013, Apr 7-8, 2014, May 29-30, 2014	Full
PALS recert (CHEO)	Nov 15, 2013	Spaces available, call 613-737-7600 ext. 33
TNCC (NDMC)	Nov 8-9, 2013	Spaces available
Trauma Conference	Oct 8, 2013	See www.ottawatraumaconference.com
Trauma Day (for nurses)	March 2014	Planning phase

REGISTRATION INFORMATION - TOH AND CHEO COURSES

ATCN

Advanced Trauma Care for Nurses

The registration form will be available to download closer to the course date from the Ottawa Hospital website under the Trauma Services education tab or you can send an e-mail to cpoulin@toh.on.ca to request the form. Complete the form and send it to Cari Poulin's attention at The Ottawa Hospital - Civic Campus, ER Department, DM-139. *Spaces are limited* to 16 participants and registration is based on first come, first served basis.

ATLS

Advanced Trauma Life Support

The next course is presently *full*. Due to the popularity of this course we need to maintain a waiting list. If you wish to become part of the waiting list, please e-mail Joy Moors at jmoors@toh.on.ca and request a registration form.

If you wish to take the course earlier you can search on the following website for other Canadian sites that offer this course, http://web2.facs.org/atls/existing.htm .

CHEO COURSES

Please contact Kerri-Lynn Whyte, at 613-737-7600 ext. 2475 to register for any course organized by CHEO (unless otherwise specified on the list above).

RTTDC– RURAL TRAUMA

For any inquiries please contact the TOH Trauma Coordinator at 613-798-5555 ext. 19601.

TNCC

Trauma Nursing Core Course

The registration form can be downloaded from the Ottawa Hospital website under the Trauma Services education tab or you can send an e-mail to trauma@toh.on.ca to request the form. Complete the form and send it to The Ottawa Hospital - Civic Campus, Trauma Services, CPC-159. *Spaces are limited* to 20 participants and registration is based on first come with payment first served basis.

TRAUMA CONFERENCE

Annual Eastern Ontario Regional Trauma Conference

The on-line brochure detailing the day's activities can be found at this address: www.ottawatraumaconference.com

In our efforts to be more environmentally friendly, registrants will receive a participant package by e-mail prior to the conference day which will include the day's agenda. The participation certificates will be sent out by e-mail after the conference.

Inquiries may be sent to trauma@toh.on.ca.

Suggestions

Please forward any topic suggestions for lectures, research questions or quality improvement initiatives. We would be happy to hear from you! Send your suggestions to: trauma@toh.on.ca

National Art Gallery of Canada, photo courtesy of Wikipedia

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Ottawa cityscape, photo courtesy of Wikipedia