

FALL 2014

TRAUMA NEWSLETTER



TOH TRAUMA SERVICES UPDATE



Photo courtesy of care2.com

I would like to take this opportunity to personally thank Betty Clark for her time spent as Trauma Coordinator while I was on maternity leave. Betty did an amazing job and developed new programs and educational offerings and laid the ground work for committees that will be a part of trauma services at The Ottawa Hospital for years to come.

These past six months have been very busy clinically for us in trauma services with over

139 patients in July and August alone.

We have also been busy providing education to the region through initiatives like the Rural Trauma Team Development Course, Advanced Trauma Life Support, Advanced Trauma Care for Nurses and Trauma nursing Core Courses.

Finally, we are very proud of the work we have done with referring hospitals within the Champlain LHIN through the newly

established Regional Trauma Network, which is described later in this newsletter.

We hope you find this newsletter useful and if you have any comments or suggestions for future issues please contact me, mwaggott@toh.on.ca.

Have a safe fall.

*Article written by
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CHEO TRAUMA PROGRAM UPDATE



The CHEO Trauma Team is pleased to announce the success of their first hospital wide mock trauma code. This dynamic experience allowed the entire hospital to participate as the mock required a Massive Transfusion Code to be called as well as a Code Purple. The ED resident mock codes continue to run weekly and we are often able to make these mocks multidisciplinary by having ED RNs and RTs participate. CHEO also continues to develop a post-trauma debriefing system that is welcomed greatly by all staff and helps the Trauma Team identify areas that we can improve upon. As a result of this process we have developed a communication and identification board has greatly increased communication between the multidisciplinary team.

The CHEO Outreach team would like to thank our LHIN partners

who invited the Pediatric Outreach Team to be a part of their continuing pediatric education. We have enhanced our program by offering a pre outreach assessment of a center's learning needs to ensure we are providing relevant education to each center. Spaces are still available, please contact Louise Lafleur to book your team's experience. CHEO 613-737-7600-2285

The CHEO Trauma Team is working on several projects to improve the trauma system as a whole in our LHIN. We are presently funded by the Ministry of Health to study and develop specific pediatrics trauma quality indicators while another one of our projects looks at the effects of inter-hospital transfer on the outcome of pediatric trauma patients. Further, the team is in the process of validating a new pediatric trauma triage tool.

CHEO's Injury Prevention Coordinator continues to help be a part of the education process of the dangers of texting and drinking and driving through assisting with the P.A.R.T.Y. program with B.Mews R.N., TOH Injury Prevention Coordinator Fall is here and families can stay active together while enjoying activities outdoors. REMEMBER head injuries are serious and can have life changing impacts on the lives of children and their families. Wearing a helmet can prevent 70-90 percent of head injuries. For more information on how to properly fit and wear a helmet please go to <http://www.cheo.on.ca/en/helmet-safety>

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TO SCAN OR NOT TO SCAN

Trauma patients come in all shapes and sizes, and more importantly, different magnitudes of injuries. When a trauma occurs in close proximity to a level 1 trauma center, where the patient's first stop is the definitive care facility, the question to scan is usually easy to answer. The complexity of the issue arises when the patient's trauma occurs in the periphery, where field triage guidelines require the patient to be temporarily assessed and stabilized by a medical center other than the definitive care facility. This could be due to geographic location of the trauma, traffic limitations and weather constraints, just to mention a few.

It is now well understood that mild and severely injured trauma patients do better once they are at the definitive care facility, and more importantly when they arrive there with minimal delays. Under-triaging patients at the scene of the injury, and delayed transfer to a trauma center are associated with an increased mortality compared to patients transported directly to the definitive care center. Furthermore, patients that are directly transported to a level 1 trauma center have shorter hospital stays and experienced lower mortality rates. This has been demonstrated repeatedly in the trauma literature.

The use of CT scan in the evaluation of the trauma patient is rapidly becoming mainstay in hospitals. A study published in the Lancet entitled: "Effect of whole-body CT during trauma resuscitation on survival: a retrospective, multicentre study" by Huber-Wagner et. al. found that patients receiving whole body CT had a reduction in mortality. Furthermore, the CT scans identified 19% more injuries in the chest, and 34% more injuries in the abdomen that required intervention, that would have otherwise been missed without the scan. The increased use of CT scans can also be attributed to the increase in the number of available CT scans in facilities tending to the care of these patients.

The question arises then, if a patient is going to be transferred to a level 1 trauma center, should that patient have a CT scan done at the initial treating hospital?

Conventional Advanced Trauma and Life Support (ATLS) teaching tells us to minimize delays to definitive therapy in the management of the trauma patient. "Once the need for transfer is recognized, arrangements should be expedited and not delayed for diagnostic procedures that do not change the immediate plan of care." This includes diagnostic peritoneal lavage, CT scans and other

studies that may be necessary in the patients care once they have arrived at the trauma center, but in the acute phase, will not change management. ATLS teaching goes further to advocate against CT scan of the head if the facility does not have neurosurgical capability. The time it takes to acquire a CT scan in a non-trauma institute can be up to 93 minutes in certain hospital systems. These are 93 minutes that would be better spent on transporting the patient to the definitive care center.

Time to scan and delay in transfer is but one of two key reasons not to pursue a scan whose findings would only be managed by the trauma center. The other reason is the fact that most CT scans are actually repeated upon arrival of the trauma patient at the receiving end. It is reported that up to 50%-60% of patients that have had CT scans at the initial hospital, receive repeat imaging on arrival in the definitive treatment center.

Some of the most commonly cited reasons for repeated CT scan are; inadequate, incomplete or poor quality of imaging, change in the patient's clinical status, and technical difficulties of uploading the images at the receiving hospital.

This extra scanning increase our patient's exposure to undue radiation, which in turn increases

their chance of developing a malignancy in the future, though only a small chance. Furthermore, there is an increased exposure to nephrotoxic contrast, and with our aging population, this places the patients at risk of renal failure. Lastly, in a publicly funded healthcare system that we all enjoy, extra health care dollars are being spent in an unreasonable way.

To sum up. As we continue moving towards regionalized health care systems, patients will continue to be transferred between one health care facility and the other. It is important that clinicians at all levels appreciate the importance of CT scans in the management of the trauma patients as they become more readily available, but more importantly, not to allow them to interfere with and delay the definitive care of these patients. As health care providers, we have a responsibility, duty and privilege to provide our patients with optimal care, while also caring for the economic sector that runs our publicly funded systems.

Just a thought.

Article written by:
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NEW PROVINCE WIDE FIELD TRAUMA TRIAGE GUIDELINES



In June 2014 New Trauma Triage and Air Ambulance Utilization Standards were released by The Ministry of Health and Long-Term Care, Emergency Health Services Branch.

These standards were based on recommendations that were developed by Centers for Disease Control and Prevention (CDC). Paramedic services across the province have until

June 15, 2015 to train their membership and implement these guidelines.

The guidelines are split into a four step decision process with the first two sections designed to identify the most severely injured patients who require immediate transportation to the nearest lead trauma hospital. For more information regarding the changes consult

www.ambulance-transition.com

Major changes with these new guidelines:

1. Standardized provincial guidelines related to trauma triage
2. Patients within a 30 minute transport time (air or land) of a lead trauma hospital who meet FTTG will be diverted directly to the LTH

3. Extrication time is no longer included in the definition of transport time.

Article written by:
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Alcohol and Falls in the Elderly 2003-2012

Barbara Mews RN, Alanna Keenan APN




Background

Alcohol (ETOH) is well recognized as a significant factor in the occurrence of traumatic injury, in particular in relation to motor vehicle crashes (MVC). Measurement of ETOH levels is part of the routine care for trauma patients.

There is limited research related to ETOH as a potential contributing factor to falls in the elderly.

At The Ottawa Hospital (TOH) in the past decade, there has been a steady increase in falls as the primary mechanism of traumatic injury for all ages. Falls are the leading cause of injury-related admissions for Canadians over the age of 65¹.

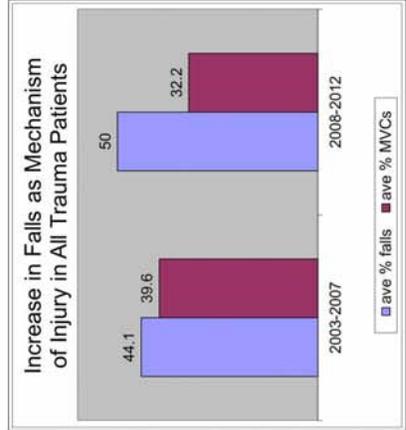
Purpose

To examine the incidence of positive ETOH levels in elderly patients (> 65 years) who fall and sustain traumatic injury.

Methods

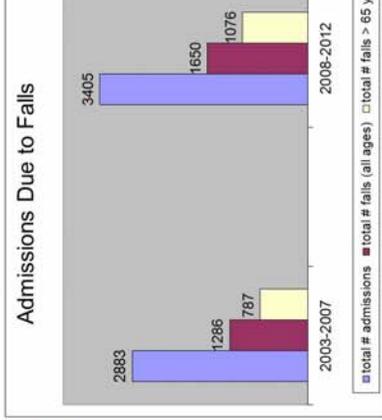
A retrospective review of Trauma Registry data at TOH was performed and 2003-2007(T1) and 2008-2012(T2) were compared. Data elements included age, gender, mechanism of injury, if ETOH levels were measured and the total number of positive ETOH results.

Increase in Falls



Admission due to Falls

In the past decade 82% of admitted patients over 65 years of age had falls as the primary mechanism of injury. In both T1 and T2 the average age of these patients was 68 years of age. The number of admissions related to falls in patients greater than 65 years of age increased by 4.6% in T2.

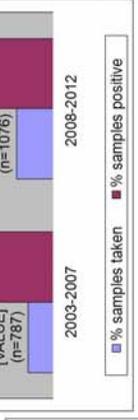


ETOH Level in Admitted Falls

There is a low rate of blood ETOH testing (T1 6.2%) & (T2 9.2%), but a high incidence of positive results. Of the samples taken, greater than 50% were positive for ETOH in both time frames.

ETOH Level in Falls > 65 yo

ETOH Testing in Falls > 65



Conclusion

Falls continue to increase in frequency as the mechanism of injury in individuals over 65. Although ETOH levels were measured in only a small fraction of this population, more than 50% of the results were positive. This suggests we may be missing ETOH as a contributing factor in the incidence of falls and that ETOH levels should routinely be measured in elderly patients who fall.

References
 1. Division of Aging and Seniors (2011) *The Facts: Seniors and Injury in Canada*. Ontario: Public Health Agency of Canada

EDUCATIONAL OPPORTUNITIES - IN ALPHABETICAL ORDER

2014 Schedule

ATLS Provider (TOH)	Oct 16-18, 2014, Nov 20-22, 2014, Feb 26-28, 2015 (full) Apr 16-18, 2015 (6 spots left)	Contact course coordinator for availability, see below
ATLS re-cert (TOH)	Feb 28, 2015 (7 spots left)	Contact course coordinator for availability, see below
ENPC	Dec 6-7, 2014	Contact course coordinator for availability, see below
Trauma Conference	Oct 7, 2014 – registration open	See www.ottawatraumaconference.com

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 trauma@toh.on.ca to request the form. Complete the form and send it to trauma@toh.on.ca or by fax at 613-761-4262 or by snail mail at The Ottawa Hospital - Civic Campus, Trauma Services, CPC-1 R-159. *Spaces are limited* to 16 participants and registration is based on first come, first served basis.

ATLS

Advanced Trauma Life Support

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>.

ENPC

ENPC is being offered at CHEO on December 6 & 7. It is a full 2 day course that covers the fundamentals of pediatric emergency nursing care through lectures and skills stations. If you are interested please contact:
Debby Voskamp at Tel: (613) 737-7600 x 3451 or by e-mail at dvoskamp@cheo.on.ca

TRAUMA CONFERENCE

The on-line brochure detailing the day's activities can be found at this address: www.ottawatraumaconference.com
Inquiries may be sent to trauma@toh.on.ca.

RTTDC – RURAL TRAUMA

The Rural Trauma Team Development Course (RTTDC) has been specifically designed for referring hospitals in our region. This course was developed by the American College of Physicians and Surgeons Committee on Trauma due to the recognition that trauma patients in rural settings have unique needs due to the isolated locations and circumstances by which many people sustain their injuries in rural settings. It is also recognized that resources, both personnel and physical, may be different in referring hospitals and as such the approach to trauma resuscitation needs to be tailored to the unique needs of each referring hospital. As a result the RTTDC is designed to train referring hospital personnel in their own environment to adopt a team approach to the initial assessment and resuscitation of the injured patient and to rapidly initiate transfer to definitive care when appropriate based. 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 trauma@toh.on.ca or by fax at 613-761-4262 or by snail mail at The Ottawa Hospital - Civic Campus, Trauma Services, CPC-1 R-159. *Spaces are limited* to 20 participants and registration is based on first come with payment first served basis.



Newsletter 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



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