

with TXA administration. **Conclusion:** The results from this study demonstrate that only 13% of delayed PPH patients presenting to the ED received TXA, and among those treated, 66% received TXA within 3 hours of presentation. The use of TXA was correlated with variables associated with an increased risk of morbidity. Given the rarity of delayed PPH presentation to the ED, the development of a treatment algorithm is recommended to ensure higher levels of timely TXA administration.

Keywords: postpartum hemorrhage, tranexamic acid

P006

Management of first trimester bleeding in the emergency department

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Introduction: Bleeding in the first trimester of pregnancy is a common presentation to the Emergency Department (ED) with half going on to miscarry. Currently there is no local consensus on key quality markers of care for such cases. Point of Care Ultrasound (PoCUS) is increasingly utilized in the ED to detect life threatening pathology such as an ectopic pregnancy or fetal viability. PoCUS leads to improved patient satisfaction, quicker diagnosis and treatment. The purpose for this study was to examine the rates of formal ultrasound and PoCUS when compared to reported and recommended rates, and also to understand the use of other diagnostic tests.

Methods: A retrospective cohort study of pregnant females presenting to the ED with first trimester bleeding over one year (June 2016 – June 2017) was completed. A sample size of 108 patients was required to detect a moderate departure from baseline reported rates (67.8 – 77.6%). The primary outcome was the PoCUS rate in the ED. The main secondary outcome was the formal ultrasound rate. The literature recommends PoCUS in all early pregnancy bleeding in the ED, with a target of 100% of patients receiving PoCUS. Additional data recorded included the live birth rate, pelvic and speculum examination rate and lab tests. There is no clearly defined ideal practice for the additional data so these rates will be recorded without comparison. **Results:** Records of 168 patients were screened for inclusion. 65 cases were excluded because they were not pregnant or had confirmed miscarriage or other, leaving a total of 103 patients included in the analysis. The PoCUS rate was 51.5% (95% CI 42%-61%), lower than previously reported PoCUS rates of 73% (67.8 – 77.6%). The formal ultrasound rate was 67% (57%-75%). Both approaches were significantly lower than the recommended rate of 100% (95.7 – 100%). Rates for other key markers of care will also be presented. **Conclusion:** Fewer PoCUS exams were performed at our centre compared with reported and recommended rates for ultrasound. Further results will explore our current practice in the management of first trimester pregnancy complications. We plan to use this information to suggest improvements in the management of this patient population.

Keywords: first trimester bleeding, point of care ultrasound, pregnancy

P007

Development of provincial recommendations for domestic violence screening in emergency departments and urgent care settings in Alberta

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Introduction: Alberta has one of the highest rates of domestic violence (DV) in the country. Emergency departments (EDs) and urgent care centres (UCCs) are significant points of opportunity to screen for DV and intervene. In Alberta, the Calgary Zone began a universal education and direct inquiry program for DV in EDs and UCCs for patients > = 14 years in 2003. The Calgary model is unique in that (a) it provides universal education in addition to screening and (b) screening is truly universal as it includes all age groups and genders. While considering expanding this model provincially, we engaged in the GRADE Adolopment process, to achieve multi-stakeholder consensus on a provincial approach to DV screening, as herewith described. **Methods:** Using GRADE, we synthesized and rated the quality of evidence on DV screening and presented it to an expert panel of stakeholders from the community, EDs, and Alberta Health Services. There was moderate certainty evidence that screening improved DV identification in antenatal clinics, maternal health services and EDs. There was no evidence of harm and low certainty evidence of improvement in patient-important outcomes. As per Adolopment, the expert panel reviewed the evidence in the context of: a) values and preferences b) benefits and harms, and c) acceptability, feasibility, and resource implications. **Results:** The panel came to a unanimous decision to conditionally recommend universal screening, i.e., screening all adults above 14 years of age in EDs and UCCs. By conditional, the panel noted that EDs and UCCs must have support resources in place for patients who screen positive to realize the full benefit of screening and avoid harm. The panel deemed universal screening to be a logistically easier recommendation, compared to training healthcare professionals to screen certain subpopulations or assess for specific symptoms associated with DV. The panel noted that despite absence of evidence that screening would impact patient-important outcomes, there was evidence that effective interventions following a positive screen could positively impact these outcomes. The panel stressed the importance of evidence creation in the context of absence of evidence. **Conclusion:** A GRADE Adolopment process achieved consensus on provincial expansion of an ED-based DV screening program. Moving forward, we plan to gather evidence on patient-important outcomes and understudied subpopulations (i.e. men and the elderly).

Keywords: domestic violence, GRADE adolopment, screening

P008

Evaluation of outcomes after implementation of a provincial prehospital bypass standard for trauma patients – an Eastern Ontario experience

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Introduction: Trauma and injury play a significant role in the population's burden of disease. Limited research exists evaluating the role of trauma bypass protocols. The objective of this study was to assess the impact and effectiveness of a newly introduced prehospital field trauma triage (FTT) standard, allowing paramedics to bypass a closer hospital and directly transport to a trauma centre (TC) provided transport times were within 30 minutes. **Methods:** We conducted a 12-month multi-centred health record review of paramedic call reports and emergency department health records following the implementation of the 4 step FTT standard (step 1: vital signs and level of consciousness, step 2: anatomical injury, step 3: mechanism

and step 4: special considerations) in nine paramedic services across Eastern Ontario. We included adult trauma patients transported as an urgent transport to hospital, that met one of the 4 steps of the FTT standard and would allow for a bypass consideration. We developed and piloted a standardized data collection tool and obtained consensus on all data definitions. The primary outcome was the rate of appropriate triage to a TC, defined as any of the following: injury severity score ≥ 12 , admitted to an intensive care unit, underwent non-orthopedic operation, or death. We report descriptive and univariate analysis where appropriate. **Results:** 570 adult patients were included with the following characteristics: mean age 48.8, male 68.9%, attended by Advanced Care Paramedic 71.8%, mechanisms of injury: MVC 20.2%, falls 29.6%, stab wounds 10.5%, median initial GCS 14, mean initial BP 132, prehospital fluid administered 26.8%, prehospital intubation 3.5%, transported to a TC 74.6%. Of those transported to a TC, 308 (72.5%) had bypassed a closer hospital prior to TC arrival. Of those that bypassed a closer hospital, 136 (44.2%) were determined to be "appropriate triage to TC". Bypassed patients more often met the step 1 or step 2 of the standard (186, 66.9%) compared to the step 3 or step 4 (122, 39.6%). An appropriate triage to TC occurred in 104 (55.9%) patients who had met step 1 or 2 and 32 (26.2%) patients meeting step 3 or 4 of the FTT standard. **Conclusion:** The FTT standard can identify patients who should be bypassed and transported to a TC. However, this is at a cost of potentially burdening the system with poor sensitivity. More work is needed to develop a FTT standard that will assist paramedics in appropriately identifying patients who require a trauma centre.

Keywords: paramedic, trauma bypass, triage

P009

Medical assistance in dying – a survey of Canadian emergency physicians

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Introduction: There have been 3714 medically assisted deaths recorded in Canada so far, with more than half of those deaths occurring outside the hospital – whether this has had any impact on emergency medicine has not yet been documented. This survey sought to find out Canadian emergency physicians' (EPs) attitudes and experiences with medical assistance in dying (MAID). **Methods:** An electronic survey was distributed to CAEP members using a modified Dillman technique. The primary outcome was defined as the proportion of EPs in favour of MAID. Secondary outcomes included experience with suicide in the setting of terminal illness, their experience and opinion on referring patients for MAID from the ED, their experience with complications of MAID, and their response to hypothetical cases of complications from MAID. Nominal variables were analyzed and reported as percentages for each relevant answer. Answers submitted as free-form text were coded into themes by the author and reported based on these themes. **Results:** There were 303 completed surveys. EPs were largely in support of MAID (80.5%), and would be willing to refer patients for assessment from the ED (83.2%), however fewer (58.3%) knew how to do so. 37.1% of EPs had been asked for a referral for MAID assessment, but only 12.5% had made a referral. While only 1% of EPs reported having seen patients present with complications from MAID (failed IVs in the community), 5.0% had seen patients present with suicide or self-

harm attempts after being told they were ineligible for MAID by another provider. **Conclusion:** This is the first study to examine the impact of MAID on emergency medicine in Canada, and it demonstrates that patients are both requesting referrals through the ED and, in rare cases, requiring medical attention for complications. This has implications for both increasing awareness of MAID referral processes for EPs, as well as for the prevention and treatment of complications of MAID in the community.

Keywords: assisted dying, medical assistance in dying

P010

Emergency department performed renal point-of-care ultrasound (POCUS) for the assessment of obstructive uropathy: Impact of a training curriculum and ongoing educational intervention

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Introduction: Hydronephrosis is the de facto measure of obstructive uropathy (OU) and can be evaluated using renal Point of Care Ultrasound (rPOCUS). This educational initiative aimed to develop an effective one-day rPOCUS curriculum and evaluate if feedback/quality assurance (QA), leads to an improvement in image acquisition and interpretation of hydronephrosis as well as comfort with the technique. **Methods:** Physicians were randomized into a QA or control group (NQA) and all attended a one day training session which involved acquiring rPOCUS scans with one-on-one instruction. Participants then performed POCUS scans on all ED patients where formal renal US was deemed clinically indicated. The QA group received feedback on every scan from qualified ED physicians. Overall sensitivity and specificity were calculated compared to formal scans using a chi-square test. Written QA was reviewed for future improvements. Crossover occurred at 10 weeks to allow for equal learning opportunity but analyses focused on pre-crossover data. Participants completed surveys at study start and end focusing on initiative effectiveness and barriers/comfort with POCUS measured with a likert scale (Not at all (1)-Very (7)). **Results:** Fourteen ED physicians participated. The most common cited barrier to utilizing rPOCUS was lack of knowledge/training (78.6%). A total of 63 POCUS scans were reviewed. Common feedback included breath-holding (69.7%), use of color doppler (48.5%) and including a transverse sweep (36.4%). Sensitivity and specificity were better in the QA versus NQA group though the difference was not significant (Se- 75.0% vs 50.0%, 95%CI: -34.0-73.4%; Sp- 89.3% vs 73.9%, 95% CI: 8.2-39.2%). Ten physicians completed the post survey; all reported improved comfort with rPOCUS in assessment of hydronephrosis (median [IQR]: $\Delta +2$ [1-3]). At study end, the comfort rating for using only POCUS and not formal scan remained low (median [IQR]: 3.50 [1.8-4.2]). The training initiative was rated highly with a median [IQR] rating of 5.50 [4.8-7.0]. **Conclusion:** Although the initiative was rated highly effective and resulted in improved comfort with renal POCUS, physicians did not feel comfortable solely using POCUS without formal scan to diagnose OU. Despite the initiative's success, further educational programs are needed before rPOCUS can be safely used as the primary investigation. In the future, a greater emphasis should be placed on the commonly noted areas of improvement.

Keywords: obstructive uropathy, point of care ultrasound