

methotrexate, 29 (5.3%) were managed with surgical intervention, and 28 (5.1%) patients had a ruptured ectopic pregnancy after their index ED visit. Of the 550 included patients, 221 (40.2%) did not have a transvaginal US during their index ED visit, 73 (33.0%) were subsequently diagnosed with an ectopic pregnancy. **Conclusion:** These results may be useful for ED physicians counselling women with symptomatic early pregnancies about the risk of ectopic pregnancy after they are discharged from the ED.

Keywords: ectopic pregnancy, emergency department, patient outcomes

P068

Predictors of admission in unscheduled return visits to the emergency department

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Introduction: The 72-hr unscheduled return visit (URV) of an emergency department (ED) patient is often used as a key performance indicator in Emergency Medicine. Patients with unscheduled return visits and admission to hospital (URVA) may represent a distinct subgroup of URVs compared to unscheduled return visits with no admission (URVNA). **Methods:** A retrospective cohort study of all 72-hr URVs in adults across nine EDs in the Edmonton Zone (EZ) over a one-year period (Jan 1 2015 Dec 31 2015) was performed using ED information system data. URVA and URVNA populations were compared and a multivariable analysis identified predictors of URVA. **Results:** Analysis of 40,870 total URV records, including 3,363 URVAs, revealed predictors of URVA on the index visit including older age (>65 yrs, OR 3.6), fewer annual ED visits (<4 visits, OR 2.0), higher disease acuity (CTAS 2, OR 2.6), gastrointestinal presenting complaint (OR 2.2), presenting to a large referral hospital (OR 1.4), and more hours spent in the ED (>12 hours, OR 2.0). A decrease in CTAS score (increase in disease acuity) upon return visit was also a risk factor (-1 CTAS level, OR 2.6). ED crowding at the index visit, as indicated by occupancy level, was not a predictor. **Conclusion:** We demonstrate that URVA patients comprise a distinct subgroup of 72-hr URVs across an entire health region. Risk factors for URVA are present at the index visit suggesting that patients at high risk for URVA may be identifiable prior to admission.

Keywords: unscheduled return visit, performance metrics, triage risk stratification

P069

Hardened tendencies: persistence of initial appraisals following simulation-based stress training

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Introduction: Stress has been shown to impair performance during acute events. The goal of this pilot study was to investigate the effects of two simulation-based training interventions and baseline demographics (gender, age) on stress responses to simulated trauma scenarios. **Methods:** Sixteen (16) Emergency Medicine and Surgery residents were randomly assigned to one of two groups: Stress Inoculation Training (SIT) or Crisis Resource Management (CRM). Residents served as trauma team leaders in simulated trauma scenarios pre and post intervention. CRM training focused on non-technical skills required for effective teamwork. The SIT group focused

on cognitive reappraisal, breathing and mental rehearsal. Training lasted 3 hours, involving brief didactic sessions and practice scenarios with debriefing focused on either CRM or SIT. Stress responses were measured with the State Trait Anxiety Inventory (anxiety), cognitive appraisal (degree to which a person interprets a situation as a threat or challenge) and salivary cortisol levels. **Results:** Because the pre-intervention stress responses were different between the two groups, the results were analyzed with stepwise regression analyses. The only significant predictor of anxiety and cortisol responses were the residents appraisal responses to that scenario, explaining 31% of the variance in anxiety and cortisol. Appraisals of the post-intervention scenarios were predicted by their appraisals of the pre-intervention scenario and gender, explaining 73% of the variance. Men were more likely than women to appraise the scenarios as threatening. There were no differences in subjective anxiety, cognitive appraisal or salivary cortisol responses as a result of either intervention. **Conclusion:** Male residents, as well as those who appraised an initial simulated trauma scenario as threatening, were more likely to interpret a subsequent scenario as threatening, and were more likely to have larger subjective (anxiety) and physiological (cortisol) responses a subsequent scenario. Both CRM and SIT training were not effective in overcoming initial appraisals of potentially stressful events.

Keywords: stress, crisis resource management, simulation

P070

Excluding ectopic pregnancy in patients presenting to a community emergency department with first trimester bleeding

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Introduction: Current guidelines recommend patients with first trimester bleeding without previously documented intrauterine pregnancy undergo urgent transvaginal ultrasound (TVUS) to exclude ectopic pregnancy. However, in Canadian practice to receive urgent TVUS, particularly out of daytime hours is difficult, if not impossible. Thus, when TVUS is not available to exclude ectopic pregnancy, providers use point of care ultrasound (POCUS) or their best clinical judgment to determine if the patient can be safely discharged home while awaiting outpatient follow-up. The objective of this study was to determine what proportion of first trimester patients presenting to a community hospital emergency department (ED) with vaginal bleeding undergo either TVUS or POCUS to exclude ectopic pregnancy. **Methods:** This is an ongoing retrospective chart review of pregnant women gestational age (GA) less than 20 weeks presenting to a community hospital ED (103,000 visits/year) with a discharge diagnosis of vaginal bleed, first trimester bleed, threatened abortion, spontaneous abortion, missed abortion, rule out ectopic pregnancy, and ectopic pregnancy from January 2016 - January 2017. Patients are excluded if they are diagnosed with a ruptured ectopic pregnancy during their index ED visit. To date, 98 patient charts have been reviewed. **Results:** Of the 98 included patients, 13 (13.3%) had a viable pregnancy, 37 (37.8%) had a spontaneous or missed abortion, 4 (4.1%) had an ectopic pregnancy, and 45 (45.9%) had unknown outcomes. Of included patients, 4 (4.1%) only had POCUS, 66 (67.4%) only had a radiologist-interpreted TVUS, and 3 (3.1%) had both POCUS and radiologist-interpreted TVUS during their ED index visits. Thus, 73 (74.5%) had either a radiologist-interpreted TVUS or ED provider-performed POCUS during their index ED visit. After their index ED visits, 2 (2.0%) patients returned with ruptured ectopic pregnancies, 1 of whom had not undergone initial US investigations. **Conclusion:** Although TVUS is standard of care to exclude ectopic pregnancy in patients presenting with first trimester