

diagnosed in the Warfarin group within one month of treatment and zero in the Rivaroxaban group. There were 7.9% (5/63) return visits for bleeding in the warfarin group and 3.1% (1/32) in the Rivaroxaban group. **Conclusion:** By implementing an outpatient DVT treatment guideline at our academic center, we increased the prescribing of Rivaroxaban. This significantly decreased both the ED LOS and return ED visits in the Rivaroxaban group. There was also a threefold increase in referrals to a thrombosis clinic. This was all achieved without increasing patient harm.

Keywords: deep vein thrombosis, quality Improvement, anticoagulation

P029

A novel use of a point-of-view camera for teaching lateral canthotomy and cantholysis to emergency physician trainees

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Introduction / Innovation Concept: Orbital compartment syndrome (OCS) is a vision threatening ocular emergency that occurs when there is a sudden rise in orbital pressure resulting in damage to intraocular structures. Lateral canthotomy and cantholysis (LCC) is a simple procedure used to decompress the orbit. Emergency physicians should be comfortable evaluating and diagnosing OCS, and performing a LCC to decrease the risk of vision loss in the event that consultation and intervention by an ophthalmologist is not possible in a timely manner. Developing this skill is challenging as this procedure is seldom performed, therefore resources need to be available. Current training videos are an excellent learning tool but are limited by several factors, such as not capturing from the perspective of the physician performing the procedure. Point-of-view (POV) cameras show the physician's perspective, which is more conducive to training as it mimics the experience for trainees. We report our novel technique of recording a LCC using a head-mounted POV camera as a resource for emergency physician trainees in learning this procedure. **Methods:** We used a head mounted POV GoPro Hero 4 Silver camera (GoPro, San Mateo, CA, U.S.A.) with a modified 5.4mm f/2.5 aftermarket lens with a 60° field of view (Peau Productions Inc, San Diego, CA, U.S.A.). This lens was pre-focused to a working distance of 17 inches, set to 1080P on narrow recording at 48 frames per second, and had spot metering and the low light functions turned on. The camera functions were controlled remotely by an assistant with the use of GoPro App on a tablet computer to ensure proper framing of the camera. **Curriculum, Tool, or Material:** Our novel use of a POV camera for recording LCC is an efficient, cost effective tool useful for medical education at an academic institution as well as a valuable resource for emergency room clinicians. The POV recording system can be a training device in an emergency setting for performing a LCC or other procedures that emergency physicians may seldom encounter. **Conclusion:** Point-of-view cameras have great potential in assisting the education at the post-graduate level within residency training programs. Video recording from the physician's perspective simulates the experience for trainees and could leave them feeling more confident in their ability to perform the procedure.

Keywords: innovations in EM education, simulation, online educational resources

P030

The FAN study: intranasal fentanyl and inhaled nitrous oxide for fracture reduction

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Introduction: Recently, intranasal (IN) fentanyl and inhaled nitrous oxide/oxygen (N₂O) mixture have been increasingly used for procedural sedation and analgesia (PSA) alone or in combination. There is a lack of data on the efficacy of these combined agents. **Methods:** The objective was to evaluate the efficacy of IN fentanyl and N₂O as PSA for the reduction of mildly-to-moderately displaced fractures and dislocations. We performed a prospective, observational cohort study between September 2014 and October 2015. Patients were recruited at CHU Sainte Justine (Montréal) and Royal Children Hospital (Melbourne, Australia). Patients aged 4 to 18 years were eligible if PSA consisted of IN fentanyl and N₂O for the reduction of mildly-to-moderately displaced fractures or dislocations. Patients received at least IN fentanyl 1.5 mcg/kg (100 mcg max) and at least a 50/50% mixture of N₂O with oxygen. Primary outcome was the efficacy of PSA measured by the patient assigned Facial Pain Scale-Revised (FPS-R). The Face, Legs, Activity, Cry, Consolability (FLACC) scale was also recorded. Depth of sedation was evaluated using University of Michigan Sedation Scale (UMSS). Adverse events were recorded following criteria of the Consensus Panel on Sedation Research of PERC/PECARN. Additional data concerning satisfaction or discomfort were evaluated via questionnaires, and follow-up telephone calls were made to elicit information on adverse events after discharge. **Results:** A total of 91 patients aged 9.7 ± 3.0 years were enrolled. There was no difference between the median FPS-R score during the procedure compared to before: Median 2 and 2 (median difference 0 [95% CI 0, 0]), respectively. The FLACC score was higher during the procedure than before: Median 4 and 0 (median difference 2 [95% CI 1, 3]). UMSS was 1 (95% CI 1, 2) during the procedure. 42 (46%) patients had adverse events, all mild: vertigo (20%), nausea (16%) or vomiting (12%). A total of 85/88 (97%) parents and 82/85 (96%) ED physicians would want the same sedation in another procedure. **Conclusion:** PSA with IN fentanyl and N₂O seems effective in our study, as evaluated by patient assigned FPS-R. Patients were minimally sedated. Adverse events were frequent but mild. Overall, parents and medical staff would want the same agents used in another procedure. Thus, PSA with IN fentanyl and N₂O appears to be an attractive option for reduction of mildly displaced fractures or dislocations.

Keywords: procedural analgesia and sedation, fracture reduction, intranasal fentanyl

P031

Assessing differences between high- and low-performing resuscitation team leaders using gaze-tracking technology

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Introduction: Crisis decision-making is an important responsibility of the resuscitation team leader but a difficult process to study. The purpose of this study was to evaluate visual and behavioural differences between team leaders with different objective performance scores using gaze-tracking technology. **Methods:** Twenty-eight emergency medicine residents in different stages of training completed four simulated resuscitation scenarios. Participants wore gaze-tracking glasses during each station. An outside expert blinded to participant training level assessed performances using a validated assessment tool for simulation scenarios. Several visual endpoints were measured, including

time, frequency, order, and latency to observation of task-relevant and task-redundant items. Non-visual endpoints included behaviours such as summarizing, verbalizing concerns, and calling for definitive treatments, among others. **Results:** Preliminary findings suggest significant differences between high and low performers. High performers check vital signs faster, and look at patients and vital signs more often than low performers. Low-performing leaders display a more fixed gaze when starting a scenario. Lastly, high performers summarize, verbalize concerns, predict and prepare for future steps, and call for definitive treatment more often than low performers. **Conclusion:** There are significant differences between high and low-performing resuscitation team leaders in terms of their visual and behavioural patterns. These differences identify potential focus points for competency evaluations, and may direct educational interventions that could facilitate more efficient development of expertise. The potential to study crisis decision-making behaviours and performances using the methods and metrics identified, both in simulated and real-world settings, is substantial.

Keywords: simulation, resuscitation, gaze-tracking

P032

ISAEM and the push for emergency medicine worldwide

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Introduction: The International Student Association of Emergency Medicine (ISAEM) is a non-profit organization composed of medical students and student groups who believe that everyone deserves high-quality emergency care. Our aim is to promote and foster the concept, philosophy, and art of Emergency Medicine (EM). More specifically, we seek to 1) create an international network of medical students interested in EM, 2) support EM Interest Groups (EMIGs) and medical students in accomplishing their goals, 3) call for the recognition of EM as an independent specialty in countries where it does not exist, 4) help medical students learn, practice, and advance EM in countries where it is already established, and 5) carry out international projects for the benefit of medical students interested in EM. **Methods:** ISAEM tries to accomplish its goals primarily by connecting interested medical students and EMIGs with each other, as well as with EM professionals and organizations around the world. Additionally, we support medical students and EMIGs financially, offer them extensive benefits through a free membership, represent their local interests through our National Ambassadors, and advocate on their behalf at the local, national, and international level. **Results:** ISAEM's membership base is rapidly growing and our organization is currently represented by students in over 20 countries. In areas where the specialty of EM is not yet recognized, such as in Cameroon, ISAEM helped create the first EMIG and assists students with local projects. In countries where EM is new, such as Brazil, ISAEM helps students discover, explore, and advance this specialty. In countries where EM is thriving, like Canada, ISAEM offers students academic and personal opportunities to advance their careers and the specialty of EM internationally. Additionally, with the help of EM leaders worldwide, ISAEM has recently launched the FOAMed (Free Open Access Medical education) Translation Project and the International Observership Program. In the future, we aim to offer students international research, clinical, and mentorship programs, as well as more financial support. **Conclusion:** ISAEM is the international voice of medical student interested in promoting access to and expertise in emergency medical services worldwide. Through international collaboration, we hope to create an extensive network that will

benefit medical students and the specialty of Emergency Medicine for many years to come.

Keywords: international, students, global

P033

Engaging Indigenous patients in addressing cultural safety in an emergency department: a pilot initiative

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Introduction: Cultural safety is integral to good clinical care, particularly for Indigenous patients. However, it remains poorly defined in emergency department care (ED). Practitioners at an urban Canadian ED serving a significant Indigenous population sought to engage with the community to define areas for improvement in culturally safe emergency department care. **Methods:** A participatory action approach was used. A Steering Committee was created, including emergency clinicians and Indigenous health researchers. The Committee collaborated with a local Indigenous health study (Our Health Counts) to aid recruitment. Relevant Indigenous community organizations were identified and engaged via email and personal visits. Recruitment posters were placed in common areas at community sites and the ED. Convenience and snowball sampling was used - potential participants called an ED research coordinator and inclusion criteria were confirmed (self identify as Indigenous, > 18 years old, ED visit within the past year). Eligible participants were invited to attend a focus group facilitated by an Aboriginal Elder. **Results:** 31 individuals called to enroll for a total of 4 potential focus groups. 1 was successfully held: 5 participants were confirmed, 2 attended. Many recruitment challenges were identified, including difficulty maintaining contact/follow-up with a transient population, poster dissemination before recruitment start date, non-Indigenous patients attracted by compensation, and potential participant safety concerns regarding non-Indigenous contact point. **Conclusion:** Our initiative highlights challenges in engaging vulnerable populations in a large city. Focus groups may be logistically too challenging for this transient population. Other real-time data collection methods, such as phone interviews or surveys may be promising. An Indigenous contact point would likely improve perceived safety. The lack of socio-demographic data collection makes identifying potential participants challenging.

Keywords: Indigenous/Aboriginal health, emergency department, cultural safety

P034

Réanimation cardio-pulmonaire sans période de "no-flow": un nouveau dispositif

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Introduction: La b-card (Boussignac Cardiac Arrest Resuscitation Device) est un dispositif permettant d'assurer une oxygénation passive continue lors des manoeuvres de compressions/décompressions réalisées dans le cadre d'un arrêt cardiaque. Ce dispositif fonctionne par création d'une valve virtuelle induite par l'accélération d'un débit d'oxygène via des micro-canalicules. Cette valve est censée s'opposer aux flux de gaz entrant et sortant de la cage thoracique lors des compressions/décompressions. Elle permettrait d'obtenir une pression positive intra thoracique lors des compressions, et une pression intra thoracique négative lors des décompressions. L'expérimentation conduite a pour but de mesurer la pression statique créée dans le dispositif par le débit d'oxygène, ainsi que les valeurs de pressions et de flux générés en intra thoracique. **Methods:** La b-card est alimentée par