

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 (N<sub>2</sub>O) 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 N<sub>2</sub>O 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 N<sub>2</sub>O 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 N<sub>2</sub>O 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 N<sub>2</sub>O 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 N<sub>2</sub>O 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