outcome was ED revisit rate. **Results**: Overall, 1168 (37.9%) of 3081 eligible patients underwent early intervention. Patients with small stones <5mm experienced more treatment failures (31.5% v. 9.9%) and more ED revisits (38.5% v. 19.7%) with early intervention than with spontaneous passage. Patients with large stones  $\geq$ 7.0mm experienced fewer treatment failures (34.7% v. 58.6%) and similar ED revisit rates with early intervention. Patients with intermediate-sized 5.0-6.9mm stones had fewer treatment failures with intervention (37.4% v. 55.5%), but only if stones were in the proximal or middle ureter. **Conclusion**: This study clarifies stone characteristics that identify patients likely to benefit from early intervention. We recommend low-risk patients with uncomplicated stones <5mm generally undergo initial trial of spontaneous passage, while high-risk patients with proximal or middle stones >5mm, or any stone >7mm, be offered early intervention.

Keywords: intervention, outcomes, renal colic

#### LO25

# Use of Glasgow Blatchford Score, time to endoscopy, and proton pump inhibitor use in patients presenting with upper gastrointestinal bleeding to the emergency department

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Introduction: Upper gastrointestinal bleeding (UGIB) is a common presentation to the emergency department (ED). Early endoscopy within 24 hours has been shown to reduce re-bleeding rates and lower mortality. However, low-risk patients can often be managed through outpatient follow-up. The aim of this study was to compare the timing and appropriateness of endoscopy and proton pump inhibitor (PPI) use in a tertiary care ED setting for low- and high-risk patients determined using the Glasgow Blatchford Score (GBS). Methods: Retrospective chart review was conducted to examine the management of patients presenting with an UGIB in 2016 to the University of Alberta Hospital ED. TANDEM and Emergency Department Information System (EDIS) databases were used to identify patients using specific ICD-10 codes and the CEDIS presenting complaints of vomiting blood or blood in stool/melena. Patients with GBS 0-3 were categorized as low-risk and those with GBS > 3 were considered high-risk with appropriateness of and time to endoscopy, disposition of patient at 24 hours, and use of PPIs determined for each group. Results: A total of 400 patients were included. A total of 319/400 patients (80%) underwent esophagogastroduodenoscopy (EGD). EGD was performed within 24 hours in 37% of patients (29/78) with GBS 0 to 3 and in 77% (248/322) with GBS greater than 3. Of the remaining high-risk patients, 11% (36/322) underwent EGD after 24 hours and 12% (38/322) did not undergo EGD. The endoscopic diagnoses were peptic ulcer disease (PUD) in 41% of patients (130/319), esophagitis in 18% (56/319), and varices in 14% (45/319). PPIs (data available 375/400) were administered (mainly intravenously) to 93% (279/300) of high-risk and 79% (59/75) of low-risk patients. Data on patient disposition showed 60/322 (19%) high-risk patients were discharged from the ED within 24 hours and only 31/60 (52%) of these underwent EGD before discharge. Of 29 low-risk patients undergoing EGD within 24 hours, 9 (31%) were admitted, 17 (59%) were discharged from ED, and 3 (10%) were kept for observation in the ED greater than 24 hours. Of low-risk patients, 76% (59/78) were discharged from the ED within 24 hours. Conclusion: A majority of patients presenting with UGIB

appropriately received endoscopy within 24 hours. 19% of high-risk patients were discharged from the ED. Earlier discharge for low-risk patients can be improved as only 76% of low-risk patients were discharged from the ED within 24 hours. As expected, PPI use was high in these patients.

Keywords: endoscopy, gastrointestinal bleeding, management

## LO26

# Are ED physicians contributing to the opioid epidemic?

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Introduction: There is an opioid epidemic which has seen an increased mortality rate of 200% related to opioid use over the past decade. Prescription practices amongst ED physicians may be contributing to this problem. Our objective was to analyze ED physician prescription practices for patients discharged from the ED with acute fractures. Methods: We conducted a health records review of ED patients seen at two campuses of a tertiary care hospital with total annual census of 160,000 visits. We evaluated a consecutive sample of patients with acute fractures (January 1 2016-April 15 2016) seen and discharged by ED physicians. Patients admitted to hospital or discharged by consultant services were excluded. The primary outcome measure was the proportion of patients discharged with an opioid prescription. We collected data using a screening list, review of electronic records, and interobserver agreement for measures. We calculated simple descriptive statistics and estimated 4 months would be required to enroll 250 patients receiving opioid prescriptions. Results: We enrolled 816 patients, with 442 females (54.2%), median CTAS score of 3, and median pain score at triage of 6/10. The most common fractures were wrist/hand (35.2%) and foot excluding ankle (14.8%). An ED pain directive was used at triage for 21.2% and 281 patients (34.4%) received an opioid during ED stay, with tramadol (21.2%) being the most common. Overall, 250 patients (30.6%) were discharged with the following opioid prescriptions and median total dosages: hydromorphone (N = 114, median dosage 23mg, range 1–120mg), tramadol (N = 86, 1000mg, 200–2000mg), oxycodone (N = 33, 100mg, 10-170mg), codeine (N = 20, 600mg, 360-1200mg), and morphine (N = 9, 100mg, 25-200mg). Of patients prescribed hydromorphone, 61 (53.5%) were prescribed > 20mg. Overall, 35 patients (4.3%) had a pain related ED visit <1 month after discharge, of which 14 (40%) received an opioid prescription on initial discharge, and 12 (34.2%) received an opioid prescription upon subsequent discharge. Conclusion: Amongst patients presenting to the ED with acute fractures, the majority were not discharged home with an opioid prescription from ED physicians. Hydromorphone was the most common opioid prescribed, with large variations in total dosage. Despite only a minority of patients receiving opioid prescriptions, there were very few return to ED visits. To limit potential abuse, we recommend standardization of opioid prescribing in the ED, with attention to limiting the total dosage given.

Keywords: analgesia, fractures, opioids

## LO27

# Risk factors for misuse of prescribed opioids: a systematic review and meta-analysis

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S16 2019;21 Suppl 1