2015 to December 31, 2017 with the diagnosis of ectopic pregnancy. Data from the chart was extracted for multiple variables including presentation, treatment, adverse outcomes and rates of rupture.

Results: In this cohort, 367 unique ectopic pregnancies were identified. 23.7% of these patients initially presented with evidence of rupture on pelvic ultrasound. Additionally, 16.2% showed evidence of hemodynamic instability (Heart rate>100, SBP<90 or evidence of significant blood loss). 18.5% (n-113) of patients who received single-dose methotrexate failed medical management and required surgical intervention. For patients who received multi-dose methotrexate, 45.1% (n-29) failed medical management. Ultimately, 53.4% of patients required operative management of their ectopic pregnancy. Although the mean Beta Human Chorionic Gonadotropin (ß-HCG) level at initial presentation was 6515 mlU/ml (SD 16291 mlU/ml) with a median of 1274 mlU/ml, 51.7% of ectopic pregnancies presented with ß-HCG levels less than the standard discriminatory zone of 1500 mlU/ml. Additionally, 40% of the patients who presented with evidence of ectopic rupture had ß-HCG levels less than 1500mlU/ml. When comparing the size of the ectopic pregnancy (based on maximum dimension) to ß-HCG levels, this comparison failed to show any correlation between the size of the ectopic pregnancy and the ß-HCG level. Furthermore, detection of ectopic pregnancies by ultrasound was also independent of ß-HCG levels.

Conclusion: ß-HCG levels do not correlate with the presence or size of an ectopic pregnancy. This further supports the need to perform appropriate diagnostic imaging regardless of ß-HCG level in patients with suspicion for ectopic pregnancy. Almost a fifth of patients present with evidence of hemodynamic instability, and approximately one quarter of patients presented with a ruptured ectopic pregnancy requiring emergent operative management. Close follow-up is essential for medically treated ectopic pregnancies as many patients will require surgical intervention for definitive management. Ultimately, more than 50% of patients still require an operative procedure to definitively manage their ectopic pregnancy.

62 Utilizing BEFAST to Implement "Direct to CT" Stroke Algorithm at Triage Decreases Door to CT Perform Time in Emergency Department

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Study Objectives: In early 2019, the American Heart Association released "Target Stroke: Phase III" which set a primary goal to achieve door-to-needle times within 60 minutes in 85 percent or more of acute ischemic stroke patients treated with IV thrombolytics. Obtaining a Head Computed Tomography (CT) Scan is the rate limiting step in the process of administering IV thrombolytics in the emergency department (ED). Emergency Medical Services (EMS) pre-notification "Direct to CT" (DCT) is one of several interventions recommended as a best practice to streamline this process. However, DCT protocols existed only for 9% of our ED stroke population whom arrived via EMS pre-notification. A new Triage DCT algorithm was implemented May 15, 2019 to address this treatment gap. Triage DCT leverages nursing use of the Balance-Eyes-Face-Arms-Speech-Time (BEFAST) scale to identify stroke patients at triage. This study retrospectively evaluates reductions from Triage DCT in (i) door to CT performed and (ii) door to Tissue Plasminogen Activator (tPA) administered.

Methods: This study occurred from May 15, 2019 to December 31, 2019 in a tertiary, urban ED with 50,000 visits/year. Prior to implementation, all ED nurses were educated during daily in-person briefs on the use of the BEFAST scale to identify potential stroke patients and initiate DCT at triage. Mock drills were simulated to prepare staff. All ED patients who activated a stroke code and had stroke symptoms onset prior to their arrival were sampled for retrospective chart review. Patients less than 18 years old or who declined interventions were excluded. All data was recorded in a secure database and included time stamps of a patient's arrival, Head CT performed, and tPA administered, in addition to their mode of arrival and final disposition. A two - tail T-test was used to determine significance in reductions between (i) Triage DCT (ii) EMS DCT and (iii) No DCT (baseline). A 2-sided alpha level of less than 0.05 was considered statistically significant.

Results: Of 609 patients, 54 (8.9%) were EMS DCT and 151 (24.7%) were Triage DCT. Baseline mean door to CT performed was 26 minutes compared to 6 (p = 0.000) for EMS DCT and 10 (p = 0.000) for Triage DCT. Of 609 patients, 30 (4.9%) received tPA. 11 (36.6%) were EMS DCT and three (10%) were Triage DCT. Baseline mean door to tPA administered was 59 minutes compared to 34 (p = 0.035) for EMS DCT and 71 (p = 0.727) for Triage DCT.

Conclusion: Triage DCT reduced mean door to CT performed (p=0.000) as significantly as EMS DCT. A comparable mean door to tPA administered reduction was not seen. It is possible a larger sample size would support such a difference.

63 Incidence and Determinants of COVID-19 Emergency Department Revisits

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Study Objectives: Emergency department (ED) revisits are associated with significant resource utilization. Accordingly, revisits serve as an important quality measure for emergency care. In recent times, EDs have been challenged by critical resource constraints in the setting of the COVID-19 pandemic. When appropriate, medically stable COVID-19 patients are discharged home rather than admitted for further care. However, the natural history of COVID-19 is not well understood and patients may quickly progress to requiring medical attention. To our knowledge, ED revisits have not been previously characterized in the setting of COVID-19. We aim to quantify the incidence of, as well as determine risk factors for, ED revisits for COVID-19 patients.

Methods: We conducted retrospective study of 323 reverse-transcription polymerase chain reaction-confirmed COVID-19 patients who presented to a single academic tertiary-care institution from March 15 to April 15 of 2020. Demographic and clinical information was abstracted from the electronic medical record. Predictor variables (age, history of hypertension, diabetes, asthma, chronic obstructive pulmonary disease, current tobacco or marijuana use) were selected based on current knowledge of risk factors for severe COVID-19 illness. All return visits to the ED within 28 days of index ED presentation were classified as revisits. Multivariable logistic regression models were used to identify independent demographic and clinical risk factors for ED revisits. We also performed exploratory univariable analyses of a subset of 179 patients who had measured serum biomarkers (absolute neutrophil count (ANC), alanine aminotransferase (ALT), ferritin, C-reactive protein, D-dimer, lactate dehydrogenase (LDH)) in order to identify potential biochemical risk factors for ED revisits.

Results: Of the 323 patients studied, 98 were discharged from the ED during their index visit and 225 were admitted to the hospital. Among those discharged, 25/98 (25.5%) returned within 28 days of index ED presentation. Median time to revisit was 3 days (interquartile range (IQR): 2 to 7). Among those admitted during their index visit (median hospital length of stay: 6 days), 26/225 (11.6%) returned within 28 days of index ED presentation. Median time to revisit for this group was 14.5 days (IQR: 5 to 22). Cumulative incidence of ED revisits was 15.8% (95% CI: 12.2 to 20.2). Patients with and without ED revisits were similar across demographic and clinical variables examined, with the exceptions of tobacco or marijuana use and history of COPD. Both tobacco or marijuana use (odds ratio (OR): 2.9, 95% CI: 1.1 to 7.6) and history of COPD (OR: 3.1, 95% CI: 1.1 to 8.8) were found to be independent risk factors for ED revisits. In our exploratory analysis of patients with biomarker data, ANC (OR: 0.808, 95% CI: 0.689 to 0.948), ALT (OR: 0.973, 95% CI: 0.953 to 0.993), and LDH (OR: 0.996, 95% CI: 0.992 to 0.999) were found to be associated with ED revisits.

Conclusion: The incidence of ED revisits in our COVID-19 cohort was 15.8% (95% CI: 12.2 to 20.2). Risk factors for revisits included current tobacco or marijuana use and history of COPD. Preliminary study suggests the utility of serum biomarker data in helping to stratify revisit risk. In future analysis we will determine the reasons for ED revisits as well as develop a model for identifying those at risk for ED revisits.

64 Health Care Costs in Direct-acting Oral Anticoagulant Major Bleeding Treated with 4-factor Prothrombin Complex Concentrate and Other Agents

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Study Objectives: Major bleeding events in the presence of direct-acting oral anticoagulants (DOAC) are associated with poor prognosis and a substantial clinical burden. Real-world data comparing economic outcomes associated with 4-factor prothrombin complex concentrate (4F-PCC) and related hemostatic agents is sparse.