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hospital resource utilization. Despite numerous society recommendations and incorporation into many local hospital guidelines, adoption by ED providers has been slow. One potential barrier is provider concern about “high risk” features on CTPE that are not included in the Pulmonary Embolism Severity Index (PESI) score.

Our study objective was to determine the frequency and assess the outcomes of aPE-ED patients with low risk PESI scores but concerning findings on CTPE.

Methods: We performed retrospective chart review of aPE-ED cases from a one-year period (1/1/2017-12/31/2017) at a single, tertiary academic center. aPE-ED cases were identified by a combination of EMR query and manual chart review by three emergency physicians (EPs). Clinical variables, including age, sex, ED vital signs, past medical history, and mental status were abstracted and used to calculate the Pulmonary Embolism Severity Index (PESI) score. Biomarkers (troponin I and B-type natriuretic protein), CTPE, point-of-care ultrasound (POCUS), and formal echocardiogram (TTE) results, length of stay, site of admission (ICU vs. non-ICU) and 7- and 30-day mortality were also recorded. Patients were grouped by risk based on PESI score, biomarkers, and presence of concerning findings on CTPE (bilateral PE with saddle, main, or lobar arteries involved OR infarct OR evidence of right heart strain).

Results: We identified 250 patients with aPE-ED. Low PESI score (≤ 85), normal biomarkers, and no concerning CTPE findings were found in 53 (21.2%) of patients (Risk group 1). Low PESI score, normal biomarkers, but one or more concerning CTPE findings were identified in 47 (18.8%) of patients (Risk group 2). Elevated PESI score (>85) was identified in 150 (60.0%) of patients (Risk group 3). Risk group had a statistically effect on length of stay (LOS), ICU admission, and mortality at 7 and 30 days (all $p < .001$). Pairwise comparisons, however, showed no statistically significant differences between risk group 1 (mean LOS 59.2 hrs, 0% ICU admission, and no mortality at 7 or 30 days) and risk group 2 (mean LOS 56.4 hrs, 2.2% ICU admission, and no mortality at 7 or 30 days), while both groups were statistically different from risk group 3 across all measures (mean LOS 138.3 hrs, 17.6% ICU admission, and 8.1% and 15.3%, 7- and 30-day mortality, respectively, all p values < 0.001). The rate of echocardiography (POCUS and/or TTE) was significantly lower in risk group 1 (19.2%) than risk group 2 (58.7%) or risk group 3 (58.3%), $p < 0.001$, but the latter two groups were not statistically different, $p = 0.32$. The rate of abnormal echo (dilated RV, abnormal RV function, or septal motion suggestive of RV pressure overload) was higher in risk group 2 (16%) than risk group 1 (0%) or risk group 3 (4.8%), although these differences were not statistically significant.

Conclusion: Acute PE patients with low risk stratification scores and concerning CTPE findings accounted for nearly 20% of our cohort. Despite a higher rate of abnormal echocardiogram findings, their outcomes were not statistically different from low risk patients without concerning CTPE findings.

149 Association of ACE-I and ARB Prescriptions With Mortality in Patients Admitted to the Hospital With COVID-19 in New York City



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Study Objectives: For several weeks in March and April 2020, New York City was the global epicenter of the COVID-19 outbreak. Minority populations in the Bronx were disproportionately affected. Since the beginning of the outbreak, there has been speculation that angiotensin-converting enzyme inhibitors (ACE-Is) and angiotensin receptor blockers (ARBs) may worsen outcomes among patients with COVID-19.

Methods: This was a retrospective case series. We included patients ≥ 16 years with COVID-19 who presented to one of five EDs between March 9, 2020 and April 4, 2020 in the New York City borough of the Bronx. The population was largely Black and Hispanic. Included were 1,122 laboratory-confirmed cases of COVID-19, and 22 COVID-negative cases in which the clinical suspicion for disease remained high despite negative testing. Laboratory confirmation of COVID-19 was performed with reverse-

transcriptase polymerase chain reaction (RT-PCR) assays on nasopharyngeal swab specimens. We abstracted data from the medical record on whether the patient had a current prescription for an ACE-I or ARB, as well as data on hypertension (HTN), diabetes (DM), chronic kidney disease (CKD), and congestive heart failure (CHF). Clinical outcomes included death, ICU admission, and need for renal replacement therapy (RRT). We determined inter-rater reliability for 10% of the data. We report Spearman’s rho and p values for each variable and clinical outcomes. We performed a logistic regression model in which death was the primary outcome and each of the predictor variables listed above were entered and retained in the model. $P < 0.05$ was considered statistically significant.

Results: The mean age of our patient population was 62.0 (SD 16.1). Thirty-two percent of patients self-reported Spanish/Hispanic/Latino ethnicity, 42% reported their race as Black or African-American, 9% reported their race as non-Hispanic white, 2% reported their race as Asian, and 13% reported their race as mixed or other. There were no statistically significant associations between ACE-I or ARB prescription with admission to the ICU or the need for RRT. There was an association between ACE-I and ARB prescription and mortality ($\rho = 0.11$, $p < 0.001$), though not between ACEI/ARB prescription and ICU admission or need for RRT. In a multivariable logistic regression model in which we controlled for medical co-morbidities, ACEI/ARB prescription was associated with mortality (OR 1.39, 95% CI 1.03-1.87) after controlling for HTN (OR 1.72, 95% CI 1.20-2.47), CKD (OR = 1.45, 95% CI = 1.05-1.90), DM (OR 1.00, 95% CI 0.96-1.05), and HF (OR 1.14, 95% CI 0.77-1.70). Inter-rater reliability was 96%.

Conclusion: Prescriptions for ACE-I or ARB were associated with increased mortality among patients ≥ 16 years old admitted to the hospital with COVID-19 after controlling for medical comorbidities.

150 Differences in Weekly Geriatric Emergency Department Visits and Specialty Consultations



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Study Objectives: To adequately prepare to serve the growing population of older adults, there have been increased efforts to build or implement geriatric-focused health care staff, settings and processes. Geriatric Emergency Nurse Initiative Experts (GENIEs) are those specialized in emergency geriatric care that provide thorough assessments of a patient’s well-being in the emergency department (ED). The objective of this study was to examine differences in the number of GENIE consults and number of patients admitted post-consult between to academic EDs in a single health system.

Methods: We conducted a multi-center, retrospective study among older adult patients (≥ 65 years) presenting to two EDs (hospital A, an urban level 1 trauma center and Hospital B, a suburban academic hospital with combined annual census of $\sim 83,000$). We compared differences in the weekly number of geriatric visits, number of GENIE consults and number of patients admitted post-GENIE-consult between October 2019 and May 2020 at two EDs.

Results: There were a total of 4,873 at hospital A and 5,724 geriatric visits hospital B in the study period. Overall, there were more weekly geriatric visits at hospital B ($p=0.006$), more weekly GENIE consults ($p<0.001$) and more GENIE consults admitted ($p=0.019$). For patients who received a GENIE consultation in the ED, 61.6% at hospital A compared to 38.6% at hospital B received at least one referral to a geriatric follow-up service.

Conclusion: As the population of older adults continues to grow, it is important to evaluate the staff, services and processes implemented to address their needs. These evaluations will be important in assessing how to optimize workflows and staffing to best support older adults where and when they need care in the ED. Further studies are needed to understand the downstream effects of the implementation of the GENIE role on overall patient care and outcomes.