the ED or <2h of admission (3.2% vs 0.05%) (all p<0.0001). Catheter-directed alteplase was given to 5 submassive PE patients and IV alteplase to 25, 24 of whom received 100 mg and 1 received 50 mg IV. ICU admission was higher (11.2% vs 2.5%) and home treatment less common (1.3% vs 11.3%; both p<0.0001); 30d all-cause mortality was higher (5.2% vs 3.5%; p=0.03) among submassive PE patients.

Conclusion: Nearly 80% of ED patients were at least partially screened for submassive PE. Those with evidence of submassive PE had higher mortality, despite more aggressive care. Further studies should investigate the impact of routine screening for submassive PE.

58 Prevalence and Prognostic Value of Proximal Clot Location in Emergency Department Patients With Acute Pulmonary Embolism Presenting With Presyncope or Syncope

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Background: In patients with acute pulmonary embolism (PE), it is assumed that a more proximal clot is required to cause obstruction or dysrhythmia sufficient to impede cerebral perfusion resulting in presyncope or syncope (combined as (pre)syncope). We characterized clot location in PE patients with (pre)syncope and evaluated associations with mortality.

Methods: This retrospective cohort study included adults with PE diagnosed by CT pulmonary angiography in 21 community EDs from 01/2013 through 04/2015. We combined electronic health record extraction with structured manual chart abstraction. Syncope was defined as an abrupt, transient, complete loss of consciousness with loss of postural tone, with rapid, spontaneous recovery, and presyncope as an abrupt, transient feeling of nearly fainting or losing consciousness as documented by the EM or consultant physician. Non-specific dizziness and light-headedness were not included. Categorization was confirmed by two abstractors and arbitrated, if needed, by a third. Proximal clots involved lobar or main pulmonary arteries. We defined PE Severity Index (PESI) Classes IV-V as higher risk. Massive PE had sustained sBP <90 mmHg over 15 minutes, received vasopressors or required CPR. Submassive PE were non-massive with elevated troponin, B-type natriuretic peptide, or right ventricular strain on echocardiogram. We estimated adjusted odds ratios (aORs) with 95%CIs for candidate predictors of 30d all-cause mortality, including (pre)syncope, proximal location, higher-risk PESI classes, and submsove or massive PE.

Results: Among 2,716 PE patients, 172 (6.3%) presented with (pre)syncope. Compared with their non-(pre)syncope counterparts, (pre)syncope patients more commonly had proximal emboli (68.6% vs 53.0%, p=0.0001), higher-risk PESI scores (52.9% vs 40.1%, p=0.001), massive PE (5.2% vs 0.6%; p=0.0001), submassive PE (51.7% vs 29.6%; p<0.0001), and 30d mortality (8.1% vs 3.8%; p=0.01). Only a higher-risk PESI class was an independent predictor of 30d mortality; aOR 9.5 (95%CI 5.4-16.6). Interaction terms between (pre)syncope and PESI, clot location and (sub)massive physiology were non-significant.

Conclusion: Two-thirds of PE patients with (pre)syncope had proximal clots. Neither (pre)syncope nor location were independent predictors of 30d mortality when adjusting for high-risk PESI classes.