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Spotlight on Special Topics

SITE-LEVEL VARIABILITY IN THE PROCESSES OF CARE OVER TIME AMONG PATIENTS WITH COVID-19 AND ELEVATED TROPONIN: INSIGHTS FROM THE AMERICAN HEART ASSOCIATION'S CVD COVID-19 REGISTRY

Poster Contributions

For exact presentation time, refer to the online ACC.22 Program Planner at https://www.abstractsonline.com/pp8/#!/10461

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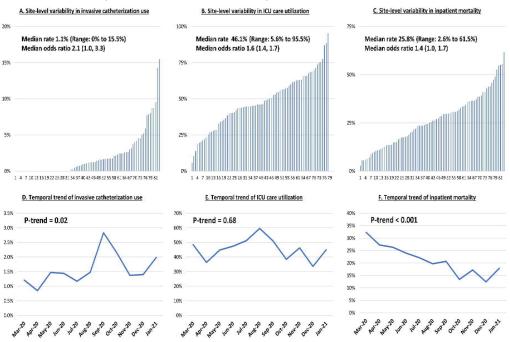
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Background: Elevated troponin levels in Covid-19 patients has been associated with worse outcomes but there is confusion as to whether these patients might benefit from invasive treatment and higher levels of care.

Methods: We included all patients with Covid-19 and elevated troponin above upper limit of normal in the American Heart Association's Covid-19 registry between Mar 2020-Jan 2021. Site-level variability in invasive catheterization, ICU need and inpatient mortality was determined by calculating adjusted median odds ratio (MOR) using hierarchical logistic regression model. We examined trends over time using Cochran-Armitage test for trend.

Results: Among 32,636 patients, 9,618 had elevated troponin (mean age 67.8±16.2 years, 58% males, 57% Caucasians), of whom 3,316 (34.5%) had ≥5-fold elevation in troponin. Across 84 sites, the median rate of invasive catherization was 1.1% with adjusted MOR 2.1 (1.0, 3.3), median ICU utilization was 46.1%, MOR 1.6 (1.4, 1.7), and mortality was 25.8% MOR 1.4 (1.0, 1.7). Over time, we noted significant increase in catheterization use, and reduction in mortality, without change in ICU use **(Figure)**.

Conclusion: There is moderate variability in the processes of care among patients with Covid-19 and elevated troponin specifically with regards to ICU utilization with an uptrend in invasive catheterization and downtrend in mortality. Comparative effectiveness studies are needed to examine whether variability in care is associated with variability in outcomes.



Variables used for adjustment included age, gender, race, baseline comorbidities and presence of ST-segment depression or elevation on presenting electrocardiograms.