The Impact of Myocardial Infarction vs. Pneumonia on Outcome in Acute Ischemic Stroke.

The aim of this study was to examine the association between MI and PNA in the setting of acute ischemic stroke and patient outcome. Eligible patients were identified from a prospectively collected stroke registry and included if transthoracic echocardiography (TTE) was performed during their inpatient stay. 426 patients met inclusion criteria (mean age 64, 73% Black, 48% female). Twenty-one patients (4.9%) experienced an MI. Patients who later suffered a MI initially presented with more severe strokes (median NIHSS 7 vs. 5, p=0.014). More patients in the MI group experienced pneumonia (26% vs. 9%, p=0.004). After adjusting for age, baseline glucose and NIHSS, the odds of in-hospital mortality for patients with MI was 3 times that of those without MI (OR 3.2 95% CI 1.1-9.7, p=0.036). When adjustment was made for pneumonia, age, baseline glucose and NIHSS, MI was no longer significantly related to in-hospital mortality (OR 2.5 95% CI 0.8-8.2, p=0.131). In our sample, while MI was significantly associated with in-hospital mortality, this association was attenuated after adjusting for presence of pneumonia. Our findings raise the question as to whether the prevention of pneumonia could improve in-hospital mortality among patients who experience MI in the setting of ischemic stroke.