INCIDENCE, PREDICTORS AND IMPACT OF STROKE IN ACUTE CORONARY SYNDROME: INSIGHTS FROM THE ACUITY TRIAL

ACC Moderated Poster Contributions
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Background: Patients with acute coronary syndrome (ACS) are often managed with early angiography followed by PCI, CABG or medical therapy (MT). While stroke is considered a major ischemic endpoint in most ACS trials, little is known about the incidence, predictors and impact of stroke in ACS.

Methods: 13,819 patients with moderate and high-risk ACS enrolled in the prospective ACUITY trial and randomized to one of three different FDA approved antithrombotic regimens. Following angiography within 72 hours, 7,789 pts (56.4%) underwent PCI, 1,539 (11.1%) underwent CABG, and 4,491 (32.5%) were treated with MT. The primary endpoints of this analysis were the rates of stroke at 30 days and 1 year.

Results: Stroke at 30 days and 1 year occurred in 59 (0.4%) and 68 (0.5%) of patients, respectively. The 30-day rates of stroke were 1.1% after CABG vs. 0.3% after PCI and 0.5% with MT (p<0.001). The 1-year rates of stroke were 1.1% after CABG vs. 0.3% after PCI and 0.6% with MT (p<0.001). Independent predictors of stroke at 30 days and 1 year included baseline troponin elevation, renal insufficiency, CHA2DS2-VASc score, and index treatment with CABG. Stroke was a strong independent predictor of death at 30 days and 1 year (HR=4.07, 95% CI [1.49, 11.11], p<0.01 and 4.25, 95% CI [2.37, 7.62], p<0.0001 respectively).

Conclusions: CABG is associated with a higher risk of stroke at 30 days and 1 year as compared to PCI and MT in moderate and high-risk ACS patients. The occurrence of stroke after an ACS is associated with high early and late mortality.