



Vascular Medicine

PREDICTORS OF SUBSEQUENT INTERVENTION AFTER INITIAL TREATMENT FOR ACUTE AORTIC DISSECTION

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Session Title: Aortic and Peripheral Artery Dissections

Abstract Category: 32. Vascular Medicine: Non Coronary Arterial Disease

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Purpose: Follow-up interventions are a common complication of acute aortic dissection (AAD), with published rates of additional procedures between 7.8%-23.2%.

Methods: This study analyzed 931 patients enrolled in the International Registry of Acute Aortic Dissection with available follow-up data (median 1.0 years (1.0-3.0)) who were categorized by AAD type and whether they received a late intervention, defined as a post-discharge surgical or endovascular aortic procedure.

Results: Type A (TA) AAD patients with late intervention were younger $(53.7\pm14.6 \text{ vs.} 59.7\pm14.2, p=0.005)$ and more often had Marfan syndrome (MFS) (19.6% vs. 3.0%, p<0.001) and prior cardiac intervention at initial presentation (20.5% vs. 7.0%, p=0.006). Type B (TB) patients with late procedures were also younger $(55.6\pm13.4 \text{ vs.} 63.9\pm12.9, p<0.001)$ and had more MFS (11.3% vs. 1.1%, p<0.001) and more cocaine use documented at initial presentation (7.3% v. 1.8%, p=0.005). No patients with dissection limited to the ascending aorta received late intervention. On follow-up, recurrence of pain (54.8% vs. 21.3% TA, 47.4% vs. 24.6% TB), new aneurysm (30.2% vs. 7.4% TA, 36.5% vs. 10.8% TB), and/or progression of dissection (44.7% vs. 7.0% TA, 24.2% vs. 5.9% TB) were associated with late intervention (p<0.001 for all unless noted).

Conclusions: Kaplan Meier estimates of freedom from late intervention were 86.6% in TA patients and 69.0% in TB patients (p<0.001). Younger patients and those with Marfan syndrome had more subsequent reintervention.

