10:15 A.M. - NOON
SESSION III

PRESIDING: Jon S. Matsumura, MD
Gilbert R. Upchurch Jr., MD

16. Complicated Acute Aortic Dissections: Endovascular Treatment of Visceral Malperfusion and Pseudoaneurysms

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OBJECTIVES: Morbidity and mortality of acute type B thoracic aortic dissections remains alarmingly high. Endoluminal options are in evolution. Reported are the outcomes following endovascular treatment of acute complicated aortic dissections.

METHODS: Single-center retrospective 5-year review of 16 acute type B aortic dissections complicated by visceral malperfusion (10) or pseudoaneurysm formation (6) treated with endoluminal intervention. Options included endografting the primary entry tear (14) and/or intravascular ultrasound-guided fenestration (4). Computed tomography scans 1 month after the procedure and annually were reviewed. Mean follow-up is 16 months.

RESULTS: Mean age was 53 (range 29-66 years, 13 men and 3 women). Overall, 30-day death, stroke, and paraplegia rates were 0%, 18.8% (3/16), and 6.3% (1/16). Success in reversing visceral ischemia or sealing a pseudoaneurysm was 100%. Cross-sectional imaging demonstrated that the false lumen was thrombosed in 6 patients, partially thrombosed in 8 patients, and completely patent in 2 of the patients treated with fenestration alone. Left subclavian artery coverage was required in 57% (8/14) of patients treated with stent grafting. Late events include 1 delayed proximal type I endoleak treated with extension of the graft, 1 rupture below the original stent graft requiring successful emergent open surgical repair and 1 late death due to endocarditis.

CONCLUSIONS: Endovascular approaches to type B dissections presenting with visceral malperfusion and/or pseudoaneurysm can achieve acceptable early results.