**STROKE AS PRESENTING SIGN OF CONGENITALLY UNICUSPID AORTIC VALVE**

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**Background.** Unicuspid aortic valve (UAV) is a rare congenital anomaly. Clinical presentation is commonly that of heart failure in men in their fourth and fifth decade of life due to premature valve calcification. We present a 47-year-old man who presented with stroke due to severely degenerated UAV with mobile calcified components.

**Case presentation.** Patient presented with transient numbness and weakness in left upper and lower extremities that started one hour prior to presentation. Family history was significant for premature CAD and valve replacement in brother at a young age. His exam was pertinent for harsh ejection systolic murmur in the aortic area radiating throughout the precordium. CT head was negative and MRI brain showed a focal area of acute ischemic injury in the left cerebral hemisphere. Transthoracic (TTE) and transesophageal echocardiography (TEE) showed a severely degenerated aortic valve with marked calcification and markedly reduced cuspal separation. There was severe stenosis with a mean gradient of 61 mmHg and calculated valve area of 0.7 cm2. There were multiple mobile echodensities seen predominantly on the aortic aspect of the AV. A CT chest showed a fusiform ascending thoracic aortic aneurysm measuring up to 43 mm. Patient underwent aortic valve replacement. Intraoperatively, the aortic valve was found to be unicuspid and heavily calcified. The patient did well postoperatively and discharged home on Aspirin and anticoagulation with warfarin.

**Discussion.** UAV is a rare congenital valvular anomaly that results from fusion of the aortic cusps that arise from three tubercles during embryonic life (estimated prevalence 0.02% in adults; male to female ratio 4:1). It may be associated with PDA, aortic aneurysms or coarctation. Premature stenosis leading to heart failure in middle age men is a common presentation of UAV. We present the first case of UAV presenting as a stroke due to embolic degenerated atheromatous debris from the valve.