**CAROTID INTIMA MEDIA THICKNESS PROVIDES EVIDENCE THAT ASCENDING AORTIC ANEURYSM PROTECTS AGAINST SYSTEMIC ATHEROSCLEROSIS**

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Previous evaluation of aortic calcium score suggests that mutations promoting ascending aortic aneurysm may protect against atherosclerosis. However, calcium score is a late indicator of atherosclerosis. We evaluated carotid intima media thickness (IMT), an earlier marker, to assess degree of atherosclerosis in ascending aneurysm patients compared to controls. Images of the right and left common carotid arteries were obtained in 52 patients with ascending aortic aneurysms and 29 controls using a Sonosite MicroMaxx portable ultrasound. The IMT was measured with Sonosite Sonocalc IMT software, a computer based algorithm with manual override. Six IMT measurements were obtained for each patient (right and left proximal, mid, distal CCA) by a single observer and averaged. A multiple linear regression analysis was applied to test for an association between aneurysm and carotid IMT. Patients with ascending aneurysms had 0.131mm lower carotid IMT compared to controls (p = 0.0002) independent of atherosclerosis risk factors (age, BMI, gender, family history, smoking, dyslipidemia, race, diabetes, HTN). Average IMT was 0.50 ± 0.13mm for individuals with aneurysm and 0.60 ± 0.11mm for controls. Age increased the IMT by 0.005mm per year (p = 0.0003). There was no significant difference in age between the two groups. BMI, male gender, positive family history, dyslipidemia, diabetes, and HTN also increased the IMT, but were not statistically significant. This investigation provides evidence that ascending aortic aneurysm protects against the development of atherosclerosis, supporting the idea that pro-aneurysmal genetic mutations are also anti-atherogenic - a "silver lining" in the cloud of aneurysm disease.