

Atherosclerosis

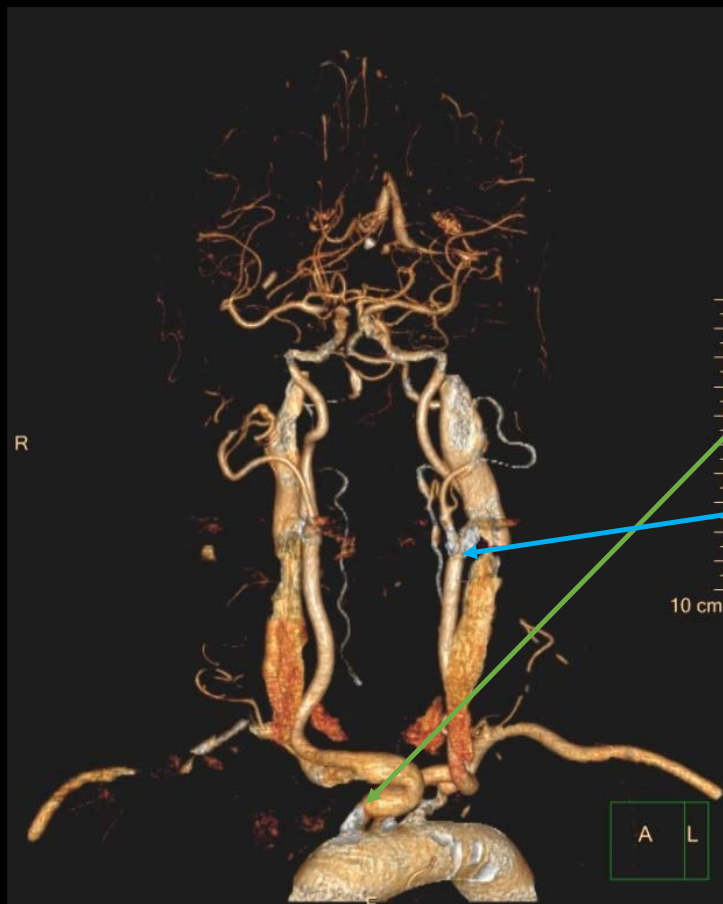
Case

- 60 yo male presents to the ED with sudden-onset blindness in his left eye. He reports this started 30 minutes ago.
- PMH is significant for hypercholesterolemia and hypertension
- Physical exam reveals a carotid bruit heard over his left neck
- 20 minutes after arriving to the ED, he reports that his vision is starting to return

What happened?

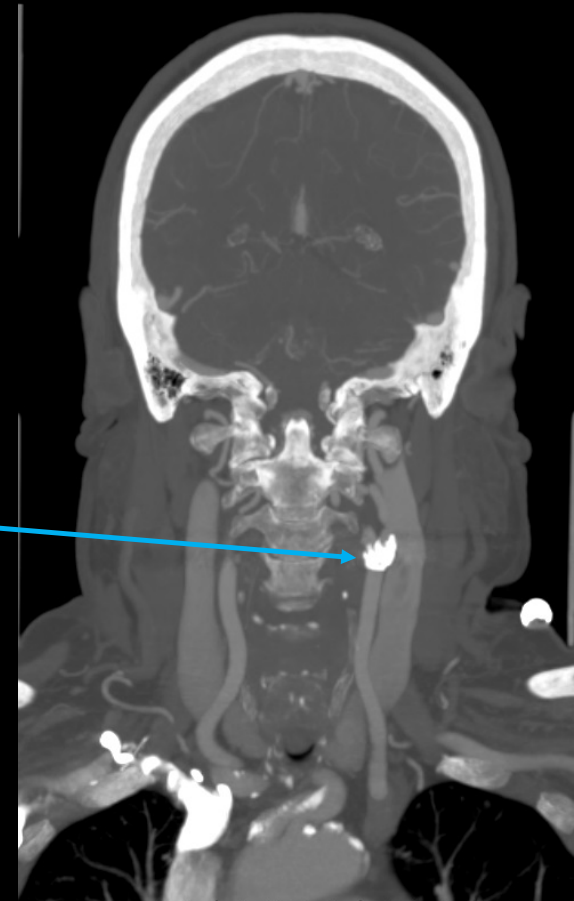
- This is a classic example of a Transient Ischemic Attack (TIA)
 - Amaurosis fugax (loss of vision on one side) that resolves with time
- Decreased blood flow to areas of the brain lead to focal neurologic deficits
- TIA symptoms usually disappear within an hour
- TIA vs stroke?
 - TIA: focal ischemia in the brain, symptoms resolve quickly
 - Stroke: area of infarction in the brain, symptoms will persist if not treated

CT ANGIOGRAM



“Findings:

1. Severe stenosis at the origin of the right brachiocephalic artery.
2. Mixed atherosclerotic plaque at the left carotid bifurcation and origin of left cervical internal carotid artery resulting in approximately 60% stenosis.”



Risk Factors

- Smoking
- Hypertension
- Hyperlipidemia
- Diabetes
- Age
- Sex (higher risk in men & post menopausal women)
- Family history
- Obesity

Complications

- Aortic atherosclerosis → aortic aneurysm
- Coronary heart disease → heart attack
- Peripheral artery disease → Limb ischemia, pain in limb, poor wound healing, amputation
- Carotid artery disease → TIA, stroke
- Renal artery stenosis → HTN, kidney disease
- Abdominal vasculature atherosclerosis → acute or chronic mesenteric ischemia