

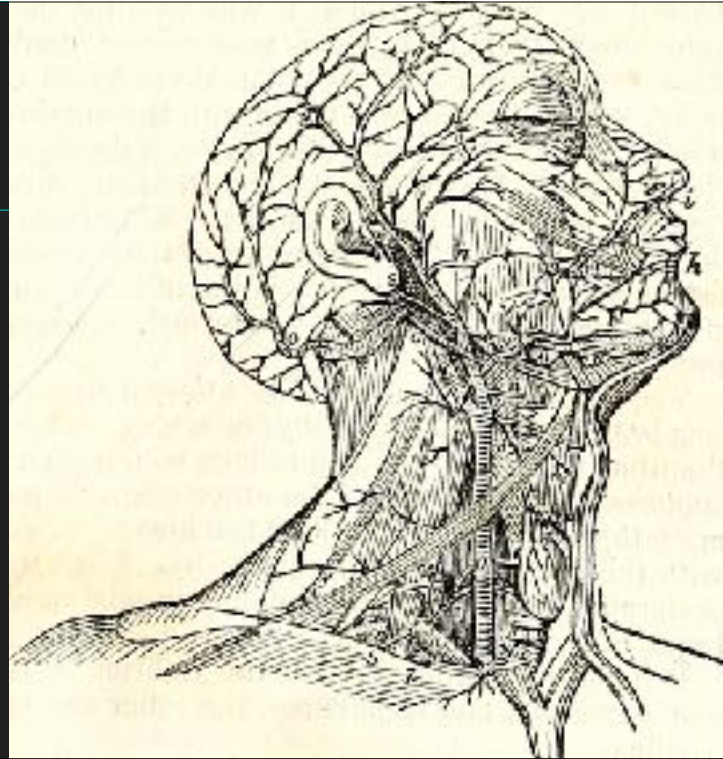
ED Rounds

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**Cervical artery
dissection**



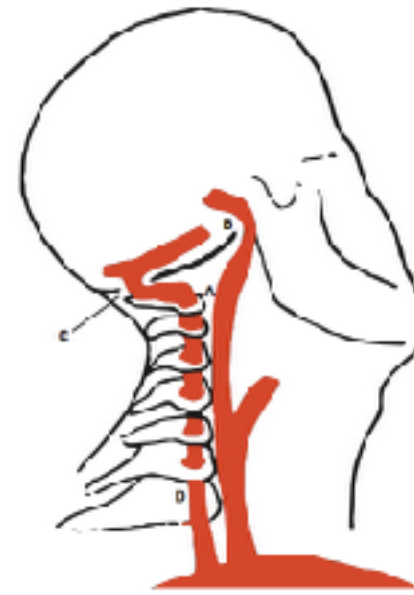
- Incidence 2.6 per 100 000 but 20% cause of strokes in young adults (<45)
 - 67% develop ischemia due to dissection within 24h
- Risk factors: trauma (major), sports, cough/sneeze, spine manipulation, CTDs
 - Up to 1/3 patients deny mechanical stress...true or trivial mechanism?



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- Symptoms: neck pain, headache (80%; sudden, gradual), vertigo, ataxia, cerebellar/stem issues
- Exam: full neuro exam, cardiac exam (¿bruits)
 - If trauma, look for seatbelt sign, challenging diagnosis in tubed patients
- Neurovascular imaging confirms the diagnosis
 - US is unreliable

Cervical artery dissection

- Loss of arterial wall integrity: dissection, thrombus, pseudoaneurysm, rupture (rare)
- VAD: most common at C1-2 and C5-6
- CAD: C2-3



The most common sites of injury to the carotid artery are where it travels over C2-C3 (Point A) and the supraclavical segment (Point B). The most common sites of injury to the vertebral artery are at C1-C2 as it enters the foramen magnum (Point C), and at C5-C6 as it enters the transverse foramen (Point D).
Image courtesy of Rhonda Cadena, MD.



- Stroke in CAD: rate of hemorrhage with iV tPa is 5.9 vs 0.6%
- AntiII therapy is mainstay for stroke prevention, one study 57% stroke rate, 4% if treated
- Other studies, difference of 20-40%
- Anticoagulation 40 vs 30 and 60-70 if thrombus
- Higher bleeding risk with it
- CADISS: CAD, RCT to antiPLT vs heparin +warfarin
- 250 Pts
- Equal stroke 3 and 1, SAH in anticoagulation group
- 7 in each arm were recurrent
- Low stroke rates
- Advice from consultants, ischemia neuro, intracranial/bleed: NS

EMERGENCY MEDICINE PRACTICE

EBMEDICINE.NET

AN EVIDENCE-BASED APPROACH TO EMERGENCY MEDICINE

Cervical Artery Dissection: Early Recognition And Stroke Prevention

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Peer Reviews

Bottom line

- Don't need trauma....can be minor or simply forgotten
- Leading cause of stroke in young adults
- Needs anti-thrombotic therapy

References

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