How To Tailor Activity Recommendations To Patients After Cervical Artery Dissection

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Disclosures

• None

Extracranial Cervical Artery Dissection

1) Extracranial Cervical Artery Dissection

Intimal flap & Double lumen

Pseudoaneurysm

Aneurysmal degeneration

Long smooth narrowing

Flame-tipped occlusion

Demographics & Risk Factors

1) Accounts for up to 25% stroke in patients < 45 years old
2) Slightly more common in men, but women with CeAD present ~5 yrs younger
3) Except hypertension, not associated with traditional cardiovascular risk factors - hyperlipidemia, diabetes, BMI
4) Underlying arterial abnormality may predispose to environmental risks for dissection:
   – Histopathology evidence
   – Association with arteriopathies, migraine
   – Genetic susceptibility

Environmental Risks – Minor Trauma

Observational data from CADISP including 1897 subjects
CeAD = 996
Ischemic stroke = 651
Controls = 280

• Prior cervical trauma (within 30 days) occurred in 40% CeAD cases (adjusted OR 7.6, 95%CI 6.6 – 10.2, p < 0.001)
• Majority classified mild:
  - chiropractic neck manipulation
  - extreme head movements
  - weight lifting
  - sports-related
Natural History After Dissection

- In general, most do very well and do not experience long term deficits
- Recurrent pain reminiscent of the original event is common and can linger for years

Lifestyle Modification After Dissection

1. Avoid heavy lifting (> 30 lbs)
2. Avoid intense valsala and isometric exercise
3. Avoid any chiropractic neck manipulation or deep tissue massage of the neck
4. Avoid high G-force activities (e.g., roller coasters)
5. Cardio – Let Your Body Be Your Guide:
   - Initially, light walking limited by patient symptoms
   - Intensify if tolerated to HR max 70-75%MPHR (220 – Age)
   - Ultimate limit HR max 90% MHR
   - Avoid extreme exercise – Orange Theory, marathons, etc

Thank you!