Blunt Cerebrovascular Injury

Indications for CTA neck:
- Blunt trauma to head, face, or neck with high risk mechanism*

Positive CTA:
- ASA 81 mg po daily
- Repeat CTA in 24-48 hours

Negative CTA:
- No further work-up or intervention

Indeterminate CTA:
- ASA 81 mg po daily
- Repeat CTA in 24-48 hours
  
Follow algorithm based on CTA results.
If still indeterminate, ask neuro-interventionalist to review scan.

Grade I/II:
- ASA 81 mg daily

Grade IV: Nothing to do
- Repeat CTA in 7-14 days (unless other indication for ASA):
  - Negative: stop ASA
  - Positive: continue ASA, repeat CTA in 3 months

Follow-up in trauma clinic until able to stop ASA (unless other indication)

Grade III/V:
- ASA 81 mg daily
- Repeat CTA in 7-14 days to verify grade. Grade IV: nothing to do. Other grade: see algorithm

Consult interventional neurology
- Grade III: Antiplatelet therapy x 3 mo
  
Stent:
  1. Start ASA 81 mg daily ASAP
  2. Add plavix 75 mg daily when safe

No stent
  ASA 81 mg daily

Follow-up with interventional neurology in 1 month

Grade V: Embolization or operative management
- Follow-up with interventional neurology or CVT as appropriate

*High risk mechanisms:
- Blunt trauma with significant force (MVC, assault with a bat...)
- Does not include ground level falls, minor assaults

BCVI Classifications:

- grade I: mild intimal injury or irregular intima
- grade II: dissection with raised intimal flap / intramural hematoma with luminal narrowing >25% / intraluminal thrombosis
- grade III: pseudoaneurysm
- grade IV: vessel occlusion/thrombosis
- grade V: vessel transection