The Denver Health & Hospital Authority BCVI screening guideline.

**Signs/Symptoms of BCVI**
- Potential arterial hemorrhage from neck/nose/mouth
- Cervical bruit in pt < 50 yrs old
- Expanding cervical hematoma
- Focal neurologic defect: TIA, hemiparesis, vertebrobasilar symptoms, Horner’s Syndrome
- Neurologic deficit inconsistent with head CT
- Stroke on CT or MRI

**Risk Factors for BCVI**
- High energy transfer mechanism
- Displaced mid-face fracture (LeFort II or III)
- Mandible fracture
- Complex skull fracture/basilar skull fracture/occipital condyle fracture
- Severe Traumatic Brain Injury (TBI) with GCS < 6
- Cervical spine fracture, subluxation or ligamentous injury at any level
- Near hanging with anoxic injury/strangulations esp with LOC
- Clothesline type injury or seat belt abrasion with significant swelling, pain, or altered MS
- TBI with thoracic injuries
- Scalp degloving
- Thoracic vascular injuries
- Blunt cardiac rupture
- Upper rib fractures (1-3)

**Multi-Slice CTA**
- Equivocal Finding or High Clinical Suspicion
  - Arteriogram
- Negative
  - Stop
- Positive
  - Grade I Injury
  - Grade II-IV Injury
  - Grade V Injury

**Surgery Indicated?**
- Yes
  - Surgerically Accessible?
    - Yes
      - Operative Repair
    - No
      - Endovascular Treatment
- No
  - RePEAT CTA in 7-10 days***

**Injury Healed?**
- Yes
  - Discontinue Antithrombotics
- No
  - Antithrombotic for 3-6 months and re-image

**Antithrombotic Therapy:**
- Heparin (PTT 40-50 sec)
- Antiplatelet Therapy**

**Consider:**
- Endovascular stenting for severe luminal narrowing, symptomatology, or markedly expanding pseudoaneurysm
- Full anticoagulation with DOAC

**Risk Factors for BCVI** (cont.)

* CTA with ≥64-channel optimal.
** Antiplatelet therapy is ASA 325mg.
*** Individualize timing of repeat CTA: if multiple injuries or high grade injury (III/IV), consider delay to 1-3 months.
If CC fistula and symptomatic, consider angiography and endovascular therapy. If asymptomatic CC fistula, reimage with CTA at 3-4 weeks.