Blunt Cerebrovascular Injury (BCVI) Screening Protocol

All patients presenting with signs / symptoms of BCVI should be evaluated with CTA. 1

**Signs / symptoms of BCVI:**
- Arterial hemorrhage between thoracic inlet and angle of the mandible
- Expanding cervical hematoma
- Focal neurologic deficit
- Neurologic examination incongruous with head CT findings
- Stroke on secondary CT scan

Screening for BCVI should be considered in asymptomatic patients with high-energy mechanisms and the following high-risk features. 1-3

**Risk Factors for BCVI: (High energy transfer mechanism with)**
- GCS ≤ 8
- LeFort fracture types II or III
- Mandible fractures
- Basilar skull or occipital condyle fractures
- Cervical spine fracture, subluxation or ligamentous injury at any level
- Diffuse axonal injury
- Near hanging with concern for hypoxic-ischemic brain injury
- Neck soft tissue injury (seatbelt sign, hanging, or hematoma)

References: