

VASCULAR INJURY

Clinical Practice Guideline

DIAGNOSIS

Imaging

- Angiography
- CTA

Hard Signs

- Active hemorrhage
- Obvious ischemia
- Palpable thrill
- Expanding hematoma

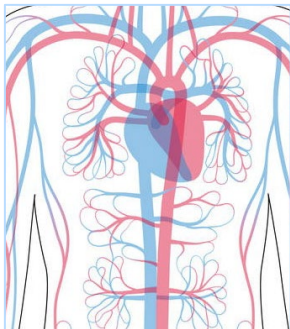
Soft Signs

- History of significant hemorrhage
- Injury close to major vessels
- Bruising
- Hematoma

Adjuncts

- Needed when:
- Soft signs present
 - Injured Extremity Index - <0.90

ECHELONS OF CARE



Role 1: TCCC point of injury hemorrhage control

Role 2: Restore physiology - restore vascular flow (shunt), ligate, amputate

Role 3: Definitive vascular repair w/ (ideally) saphenous vein

OCONUS Role 4: Surveillance and assessment of soft tissue coverage

CONUS Role 4: Surveillance/further diagnostics/ delayed revascularization

INJURY MANAGEMENT

Reference Tools

- Extremity Vascular Injury (Algorithm)
- Torso Vascular Injury
- Cervical Vascular Injury
- Pearls for Special Vascular Conditions
- Ligation
- Thrombectomy with Fogarty catheters
- Temporary vascular shunts (i.e. Argyl, Javid, Sundt)
- Harvesting and use of autologous vein
- Use of prosthetic graft material
- Address venous outflow
- Soft tissue coverage

- ✓ Documented injured extremity index.
- ✓ Documented neurovascular exam
- ✓ Revascularization (i.e. shunt) prior to transfer to next level of care.
- ✓ Reperfusion (shunt or repair) or ligation within 4 hours of injury
- ✓ Major vascular injury with signs of hemorrhagic shock get blood products or MTP activation



This information is pulled from the evidence-based Joint Trauma System (JTS) Vascular Injury Clinical Practice Guideline (CPG). JTS CPGs can be found at the [JTS CPG website](#) or the [JTS Deployed Medicine site](#).