

LEGEND

- Decision Point
- Selection
- Diagnostic Step
- Action Item

Neck Penetrating Trauma

Platysma violation suspected?

- Hard Signs**
- Expanding or pulsatile hematoma
 - Active pulsatile bleeding
 - Air from wound
 - Bruit/thrill
 - Massive subcutaneous emphysema
 - Severe hematemesis or hemoptysis
 - Focal neurological deficit

No

Irrigate and Close Wound

Discharge

Yes

Damage Control Resuscitation

Hemodynamically unstable? or Hard signs present?

No

CTA Neck

Injury to Vasculature, Airway, Digestive tissue?

Yes

OR (possible IR for Zone I or III injury)

Consider Hybrid OR

No

Irrigate and Close Wound

Discharge

- Soft Signs**
- Hoarseness
 - Voice changes
 - Stridor
 - Dysphagia
 - Hemoptysis

Indeterminate or Soft signs

Laryngoscopy
Bronchoscopy
Esophagoscopy
+/- OR exploration

Yes

OR
+/-Bronchoscopy
+/-Esophagoscopy
IR Angioembolization for Zone III Vascular Injury

Tisherman SA, Bokhari F, Collier B, Cumming J, Ebert J, Holevar M, et al. Clinical Practice Guideline: Penetrating Zone II Neck Trauma. The Journal of Trauma: Injury, Infection and Critical Care. 2008 May;64(5):1392-405. Ibraheem K, Muhammad K, Rhee P, et al. "No Zone" approach in penetrating neck trauma reduces unnecessary computer tomography angiography and negative explorations. Journal of Surgical Research. 2018 (221):113-120. Inaba K, Bernardino CB, Menaker J, et al. Evaluation of multi-detector computed tomography for penetrating neck injury: A prospective multicenter study. Journal of Trauma. 2012 72(3): 570-584.