



COMMENTS

Zone 3: above angle of mandible
Zone 2: between angle of mandible & cricoid cartilage
Zone 1: below cricoid cartilage

Immediate operation indicated for:

- airway compromise and inability to orally intubate
- obvious signs of hemorrhage, expanding hematoma
- Air emanating from wound or massive sub-Q air c/w tracheal injury
- Saliva or food from wound c/w esophageal injury
- CXR or other evidence of mediastinal or thoracic hemorrhage, shock.

Most Zone 3 wounds involve hemorrhage from branches of external carotid & are best managed by A/G + embolization. Surgical exposure is difficult.

Routine exploration of Zone 1 injuries problematic due to exposure difficulty. Liberal use of Non-invasive studies for dx. and planning operative approach. Consider CT / CTA as alternative in selected patients.

Candidates for expectant management should satisfy **ALL** of the following criteria:

- No hematoma / swelling, bruit, thrill, pulse changes
- No active hemorrhage or history of hemorrhage
- No associated cranial nerve deficits
- No associated neurologic deficit
- No aero-digestive blood / oropharyngeal blood
- No dysphagia, dysphonia, or hoarseness/voice change
- No suggestion of hematoma or hemo/pneumo thorax on CXR or hematoma or air on AP/lat neck
- Patient is reliable & cooperative to this examination

MANAGEMENT ALGORITHM FOR PENETRATING NECK INJURIES