

3. CRANIOFACIAL, NECK & SPINE

G. Penetrating Neck Guideline

OBJECTIVE: To provide guidelines for the diagnosis and management of penetrating injuries to zone II of the neck.

DEFINITIONS: Penetrating Injury: Any injury caused by either a stab wounds (SWs), gunshot wounds (GSWs) and/or a foreign body (FB) that penetrates the skin.

GUIDELINE: The management of injuries to the neck that penetrate the platysma is dependent on the anatomic level of injury. The neck is divided into three zones. Zone I, includes the thoracic inlet extending from the sternal notch to the level of the cricothyroid membrane; injuries to this zone are considered thoracic injuries. Zone II extends from the cricothyroid membrane to the angle of the mandible. Zone III extends from above the angle of the mandible to the skull base; injuries to this zone are considered head injuries. These guidelines apply only to the diagnosis and management of penetrating injuries to Zone II of the neck. Mortality from penetrating injuries to Zone I and III is 40%.

1. For the patients with hard signs of injury including: active hemorrhage, expanding hematoma, bruit, pulse deficit, hoarseness, stridor, respiratory distress, and/or hemiparesis, immediate operative management is indicated after having secured the airway. Give an antibiotic that covers the flora of the mouth (penicillin, clindamycin) immediately before exploration of the neck.
2. For stable patients, a determination should be made of whether the platysma has been penetrated. Patients with wounds that have not penetrated the platysma can be discharged after having washed and closed the wound.
3. In the stable patient with soft signs such as venous oozing, non-expanding hematoma, minor hemoptysis, dysphonia, dysphagia and subcutaneous emphysema whose platysma has been penetrated obtain a CT angiogram of the neck and esophagography starting with gastrografin in patients with GSWs¹. Obtain esophagography in patients with SWs only if they have odynophagia. If the esophagography is inconclusive proceed with a thin barium esophagogram or alternatively with flexible esophagoscopy²⁻⁵.
4. Stable patients with penetration of platysma but without any sign of injury should be observed for 24 hours and then be discharged⁹.

References:

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Approved Date: 07/31/2013

Revised Date: 02/16/2023

To be Reviewed: 02/2026