

**TRAUMA/CRITICAL CARE SURGERY**  
**DEPARTMENTAL GUIDELINES AND**  
**PROCEDURES**

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**TITLE:** TRANSMEDIAL GUNSHOT WOUND (TMGSW)

**PURPOSE:** The purpose of this guideline is to define and reflect the operative versus direct diagnostic interventions needed in patients who sustain TMGSWs.

**I. DEFINITIONS:**

**DEFINITION OF TMGSW:**

- 1) Evidence of missile entry and exit on opposite sides of the thorax
- 2) Evidence of missile entry with CXR showing missile on opposite side of thorax or in close proximity to mediastinum
- 3) Multiple gunshot wounds to the thorax

**II. RATIONALE:**

Transmediastinal gunshot wounds (TMGSW) can present a challenging diagnostic dilemma that often requires a special and rapid approach to quickly identify and repair life-threatening injuries. Little controversy exists concerning the treatment of hemodynamically unstable patients with TMGSWs – they generally have major cardiac or vascular injuries that require immediate operation. In the stable patient, occult injuries may be present to mediastinal structures, including vascular, tracheobronchial, or esophageal injuries. A pericardial (PC) FAST and an initial chest xray can diagnose hemopericardium or a hemo/pneumothorax, respectively, for which rapid intervention can be instituted. If operative intervention is not immediately required, a computed tomography (CT) scan of the chest can then further be used to assess for trajectory – a remote missile trajectory negates further testing, while a concerning or suspicious trajectory mandates further directed evaluation. This workup can include aortography/angiography, bronchoscopy, contrast esophagography, and esophagoscopy, with operative intervention utilized as needed based on findings.

**REFERENCES/BIBLIOGRAPHY:**

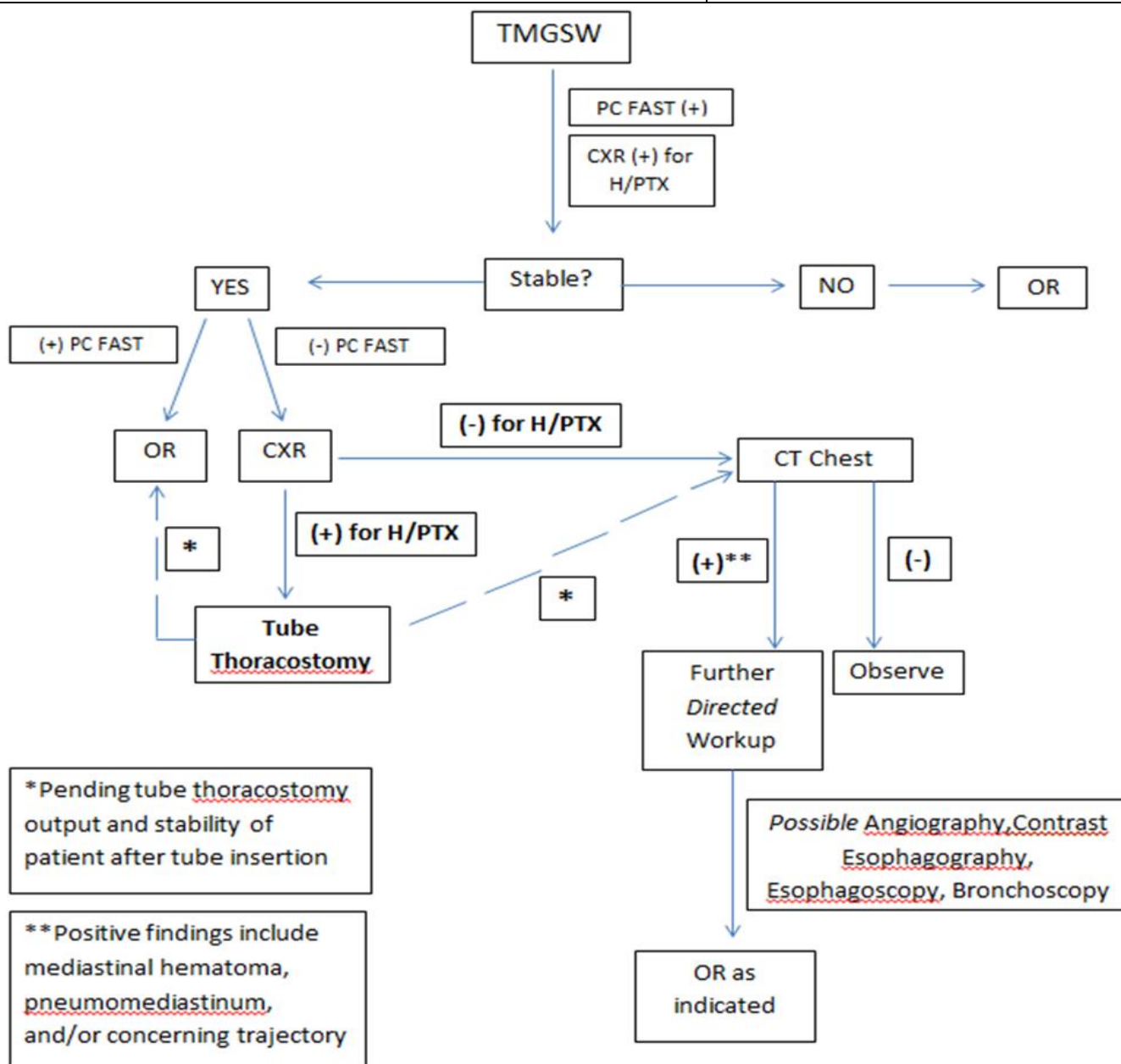
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**DEPARTMENT OF PRIMARY RESPONSIBILITY:**

*Trauma Services*

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**REVISION HISTORY:**

Effective Date	Version # (If Applicable)	Review or Revision Date (Indicate Reviewed or Revised)	Reviewed or Approved by: (Directors, Committees, Managers, and Stakeholders etc.)