

JOHNS HOPKINS ALL CHILDREN'S HOSPITAL

# Penetrating Thoracic Trauma Clinical Pathway

Johns Hopkins All Children's Hospital

# Penetrating Thoracic Injury Clinical Pathway

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Owners: Trauma

*This pathway is intended as a guide for physicians, physician assistants, nurse practitioners and other healthcare providers. It should be adapted to the care of specific patient based on the patient's individualized circumstances and the practitioner's professional judgment.*

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# Penetrating Thoracic Trauma Clinical Pathway

## **Rationale:**

This clinical pathway was developed by a consensus group of JHACH physicians, advanced practice providers, nurses and pharmacists to standardize the management of children presenting with penetrating thoracic injury.

This guideline is designed to assist the emergency bedside provider with the potential decisions on diagnostics and disposition based on the clinical presentation of the patient

## **Background**

Thoracic injury occurs infrequently in pediatrics but injuries can be immediately life threatening with mortality rates of 15-26%. Rapid and thorough assessment is necessary to prevent a bedside practitioner missing/delaying identification of and intervening with a life threatening injury.

## **Diagnosis**

Information received pre arrival or at triage will help assist the bedside practitioner in identifying thoracic penetrating injury. For the unconscious patient, rapid and thorough primary and secondary assessment is necessary to find all injuries.

Lab tests: CBC, CMP, T&S, PT/PTT

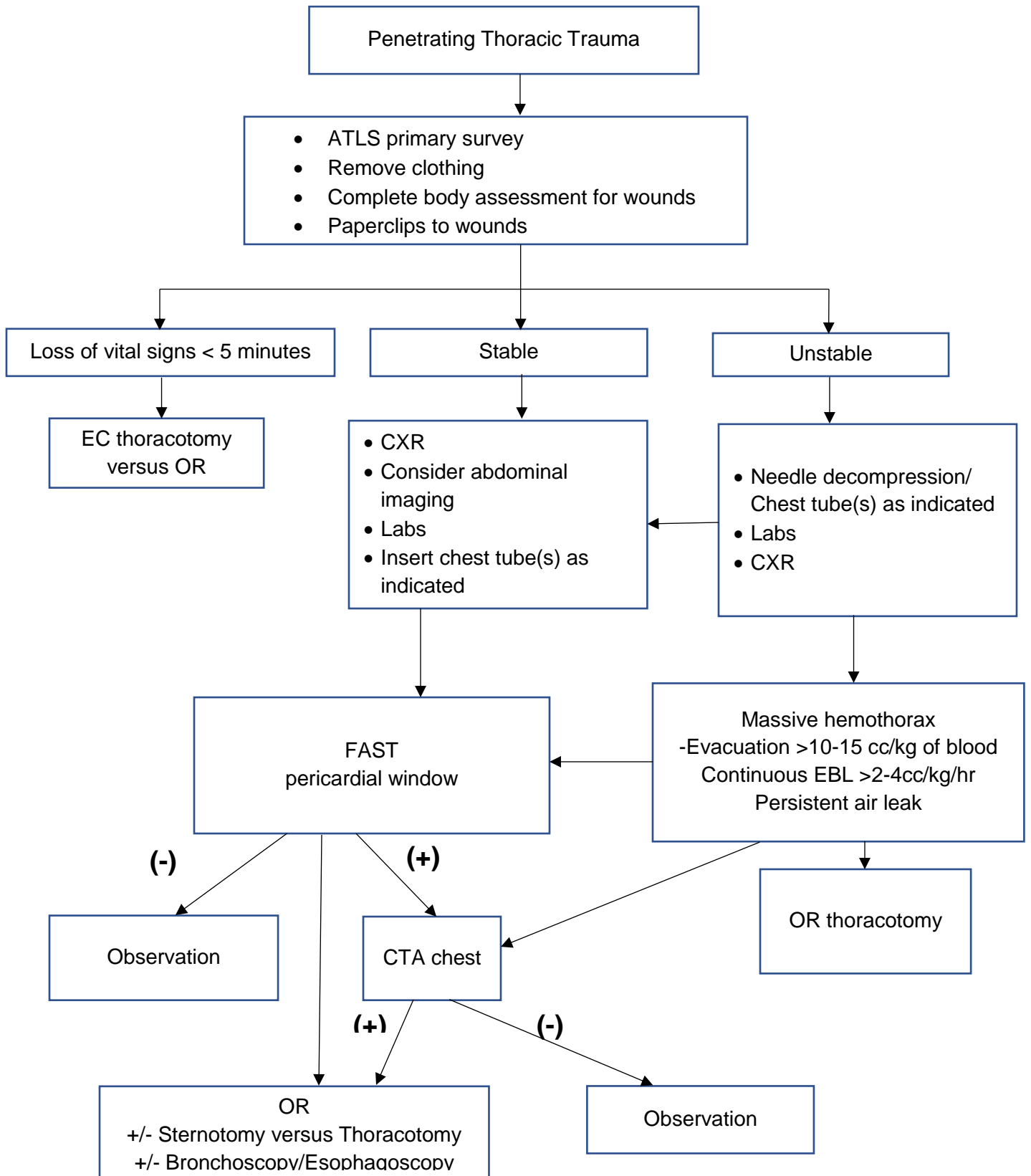
Radiologic studies: CXR, Chest CT

## **Clinical Management**

Determining stability of the patient on presentation is necessary to determine the immediate interventions necessary and to determine diagnostic and disposition options for treatment. Because penetrating injuries can be unseen injuries, a comprehensive assessment and high index of suspicion is necessary.

Assessment and intervention should be coordinated with a trauma team activation and care driven by ATLS protocol.

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## **Emergency Center Management**

Patients presenting for thoracic penetrating injury should have a level 1 trauma team immediately activated and ATLS protocols followed for initial assessment, correction of life threatening injuries, rapid secondary assessment, and disposition decision.

All patient with an injury will be admitted to a surgical service under the direction of a trauma attending.

## **Discharge**

After thorough and comprehensive assessment and diagnostics completion, a patient with no injury can be discharged from the EC.

## **Outcome Measures:**

- Team compliance with guideline
- Unexpected morbidity and mortality

## **References**

Children's National Trauma And Burn Handbook (hardcopy on file)

Eastern Association for the Surgery of Trauma Management Guidelines (EAST).

<http://www.east.org>

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Pediatric Trauma Society Clinical Practice Guidelines. <http://pediatrictraumasociety.org>

UK HealthCare Pediatric Trauma Care Guidelines. 2011. [www.hosp.uky.edu/careweb](http://www.hosp.uky.edu/careweb)

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**Disclaimer**

*Clinical Pathways are intended to assist physicians, physician assistants, nurse practitioners and other health care providers in clinical decision-making by describing a range of generally acceptable approaches for the diagnosis, management, or prevention of specific diseases or conditions. The ultimate judgment regarding care of a particular patient must be made by the physician in light of the individual circumstances presented by the patient.*

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