

**TRAUMA SERVICES**  
**DEPARTMENTAL GUIDELINES AND**  
**PROCEDURES**

Procedure No:  
Page Number: 1 of 2  
Effective Date: 10/15

**TITLE:** BLUNT CARDIAC INJURY: INITIAL EVALUATION AND MANAGEMENT GUIDELINES

**PURPOSE:** To provide a guideline for the initial evaluation and management of blunt cardiac injury at the Hospital

**I. DEFINITIONS:**

**Blunt Cardiac Injury (BCI)** – refers to injury sustained due to blunt trauma to the heart. The manifestations of such range from clinically silent, transient arrhythmias to deadly cardiac wall rupture.

**II. GUIDELINES/ RATIONALE:**

The following is a guideline for the initial evaluation and management of blunt cardiac injury (BCI):

- 1) Initial evaluation and screening
  - a. Patients presenting with significant blunt thoracic injury should be screened for BCI with electrocardiography (EKG) and serum troponin I (TnI).
    - i. Injury patterns of significant blunt thoracic injury:
      1. Multiple thoracic injuries
      2. Pulmonary contusion
      3. Fracture of the first or second rib
      4. Three or more rib fractures
    - ii. A normal EKG and negative TnI (<1.0 ng/mL) rules out BCI.
    - iii. Neither elevated TnI nor EKG abnormality is diagnostic of BCI.
    - iv. Isolated sternal fracture, in the absence of signs of cardiac injury, does not require screening.
    - v. Cardiac enzymes should not be ordered.
  - b. Patients presenting with significant blunt thoracic injury and either unexplained hemodynamic instability or new onset arrhythmias (suspected BCI) should be

Procedure No:	
Page Number:	2 of 2
Effective Date:	10/15

## 2) Admission

- ### 3) Additional testing

- 4) The presence of BCI is not an absolute contraindication to operative intervention.

## TRAUMA SERVICES

Effective Date	Version # (If Applicable)	Review or Revision Date (Indicate Reviewed or Revised)	Reviewed or Approved by: (Directors, Committees, Managers, and Stakeholders etc.)
10/15	1		Trauma Guideline Committee