CARDIAC CONTUSIONS

HOW DO YOU KNOW AND WHAT TO DO

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What is a Cardiac Contusion?

- Pathophysiology
  - Bruising of myocardium
- Naming Game Issue
  - Blunt Cardiac Injury
  - Cardiac Injury
  - Cardiac Concussion
  - Blunt Chest Trauma

(Marcolini & Keegan, 2015)

"And always with a heart contusion arise both doubt and much confusion." (Marcolini & Keegan, 2015 p. 519)

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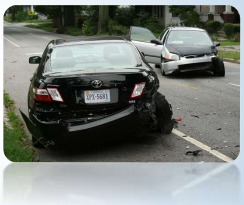
Who's at Risk?

- MVC
  - #1 Cause
  - 20% of deaths from blunt cardiac injury
- Multiple Trauma (13% risk)
  - Lung contusion
  - Multiple Rib fractures
  - Hemopneumothorax
  - Multisystem trauma
- Falls
  - Don't rule out



(Alborzi et al., 2016 and Marcolini & Keegan, 2015)

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Clinical Manifestations of Cardiac Contusions

- Varies
  - Asymptomatic
  - Nonspecific
  - Severe Symptoms
- Common Symptoms Include:
  - Chest pain
  - Shortness of Breath
  - Chest tenderness
  - Dysrhythmias

Alborzi et al., 2016 and Marcolini & Keegan, 2015)

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Diagnostics for Cardiac Contusions

- Symptom Analysis
- Electrocardiogram
  - Limitations
  - Screening tool
- Echocardiogram
  - TEE
  - Transthoracic
- CT Scan
- Cardiac Troponin I

Alborzi et al., 2016; Marcolini & Keegan, 2015; Emet et al., 2015

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Potential Complications of a Cardiac Contusion

- Varies
  - Degree of area injured
  - Where injury is
  - Comorbidities
- Include
  - Arrythymias
  - Cardiac failure
  - Cardiac Rupture
  - Tamponade

Alborzi et al., 2015 and Marcolini & Keegan, 2015

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Treatment and Monitoring Recommendations

- Based on Patient
  - History
  - Extent of damage
- Monitoring
  - Telemetry
  - ICU
- Surgical Repair
  - Valve involvement
  - Rupture
- Supportive Therapy

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References

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