



Recognition and Onsite Management of Acute Abdominal Injury in an Adolescent Wrestler: A Case Report

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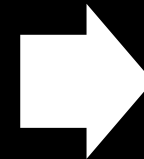
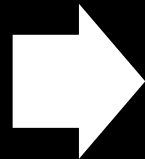
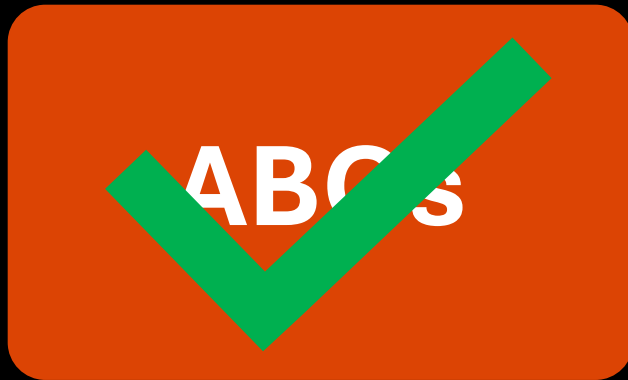
Patient History

- **Description:** adolescent, male, wrestler
- **Chief Complaint:** L sided pain at the abdomen & ribs
- **Mechanism of Injury:** landing on L side following takedown by competing athlete
- **Past Medical History:** athlete had been sick with a cold the week prior

Initial Hypotheses

- Muscle Spasm
- Rib Fracture
- Costochondral Injury
- Internal Abdominal Injury

On-Mat Objective Examination



- Left lower ribs
- Sternum
- (-) Rib Lateral Compression Test

Differential Diagnoses from the Mat

- Muscle Spasm
- Rib Fracture
- Costochondral Injury
- Internal Abdominal Injury

Off-Mat Objective Examination

Vital Signs

- Responsiveness
- Pallor
- Heart Rate
- Respiratory Rate

Initial Assessment & Intervention

- **Initial Diagnosis:** Rib contusion with suspicion of internal injury
 - **Due to:**
 - pain with abdominal palpations in left upper quadrant
 - Possible positive Kehr's Sign
 - Nausea
- **Athlete, Parent, & Coach Education:** removal from further competition & continued monitoring for red flags for internal bleeding

**Approximately 60 minutes
later...**

Athlete Deterioration

- Host ATC notified & responded
- **Upon arrival at the scene:**
 - Athlete in the care of two nurses who were present as event spectators upon arrival to the scene following vomiting & loss of consciousness
 - Athlete had been placed in Trendelenburg position to prevent hypovolemic shock
 - EMS activated & EAP Initiated

Athlete Deterioration

- **While awaiting EMS:**
 - Continued monitoring vital signs & level of consciousness, maintenance of Trendelenburg
 - Obtaining further medical history
- **Upon Arrival of EMS:**
 - Care transferred to EMS
 - Found low blood pressure & recommended transport to hospital
 - Started IV fluids due to low blood pressure
 - Patient condition worsened during placement of IV, rolled over and began vomiting, coffee-ground emesis present

Outcomes - What We Know

- 1. Athlete was transported to nearest hospital with capacity for management of an emergent internal injury**
- 2. Continued communication with his home athletic trainer by the host athletic trainer**
 1. Internal bleeding present due to ruptured spleen
 2. Emergent surgical intervention with stay in ICU for recovery

Key Takeaways

**Serial
Monitoring**

**Red
Flags**

**Interdisciplinary
Management of
Acute Injury**

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