

# **Real World Trauma to the Abdomen**

**9/24/2013**

Dr. Michael L Lemon, DO

# Disclosures

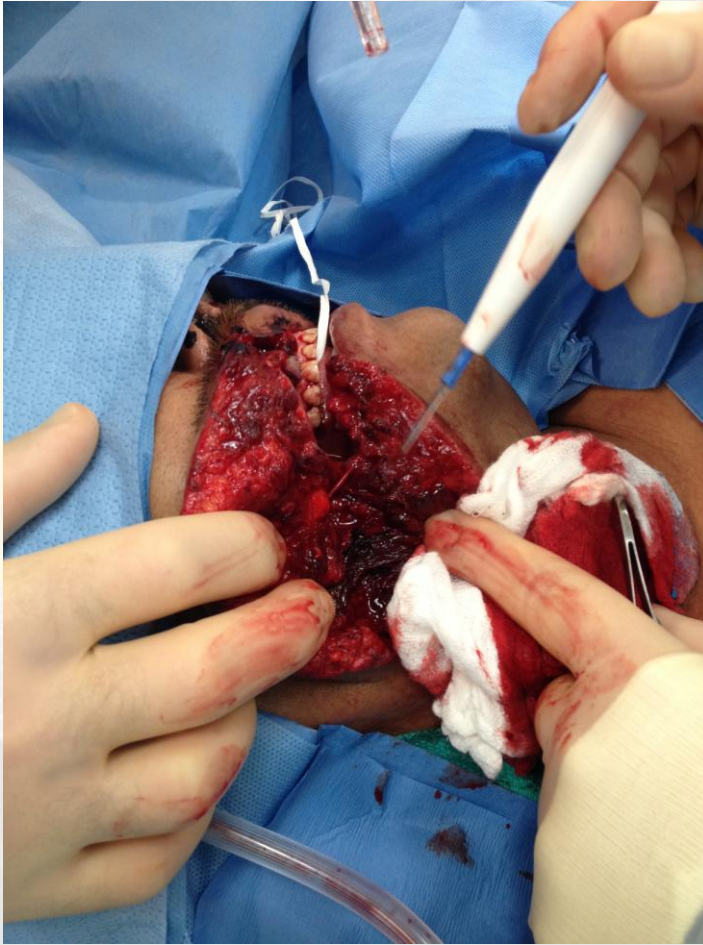
- No financial disclosures
- ATLS Instructor – ATLS images and ATLS course content

# Why?

**Unrecognized abdominal and pelvic injuries continue to be a cause of preventable death**



# Most Benefit



# Most Benefit





# Objectives

- Discuss EMS Trauma Alert Report (hand off)
- Identify Key Anatomic Regions of the Abdomen
- Recognize the organs at risk for injury
- Recognize Patients at Risk for Abdominal Trauma
- Identify the acute management of abdominal Injury

# **EMS TRAUMA ALERT REPORT “THE HANDOFF”**

# Handoff

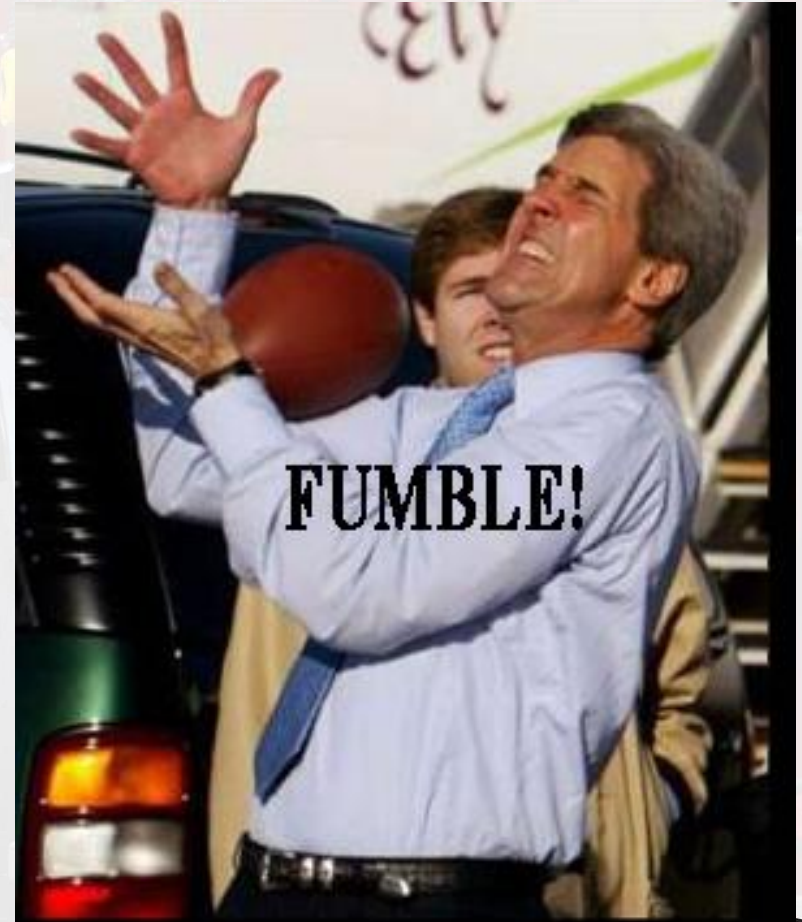




# Handoff



# Handoff fail





# Handoff Success

- Pt. Demographics
  - Pt. History
  - Mechanism
  - Injuries
  - Hemodynamics
  - Treatment
- ABC MIVT
    - Airway
    - Breathing
    - Circulation
    - Mechanism
    - Injuries
    - Vitals
    - Treatment



# Handoff Practice



# Handoff Success

- 35 y/o healthy male with no allergies
- Farming Accident
- Large L abdominal wall and flank laceration with evisceration
- Tachy with normal BP
- Saline gauze over his bowels, (2) 16 gauge IV's, O2 by NRB at 15 L/min





# Handoff Success





# KEY ANATOMIC REGIONS OF THE ABDOMEN

# Anatomy



Anterior abdomen



Flank



Back

# Anatomy

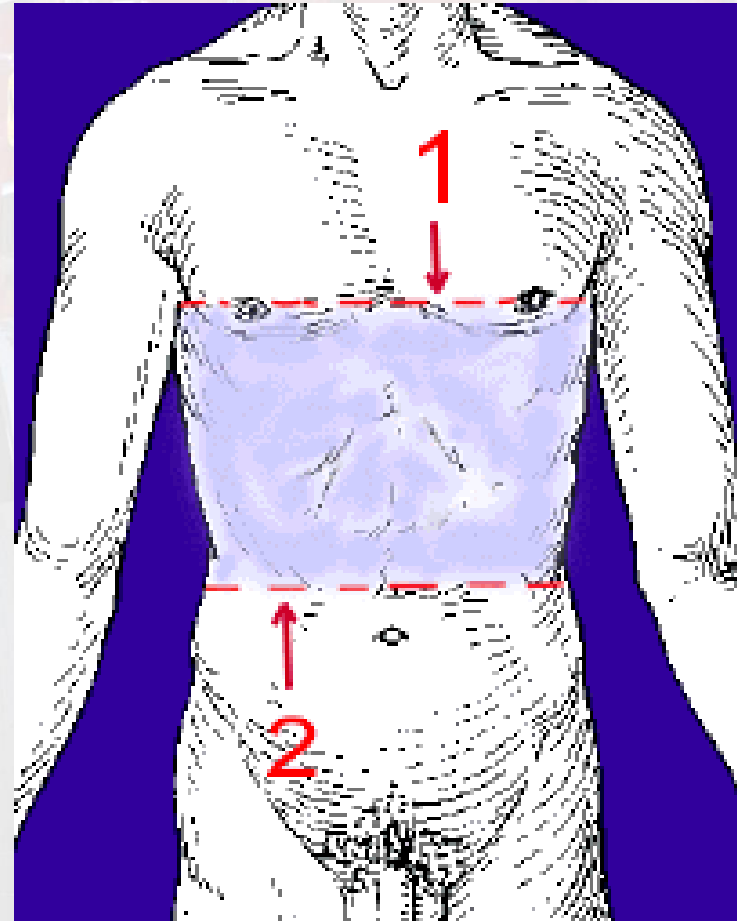
- Anterior Abdomen



# Anatomy



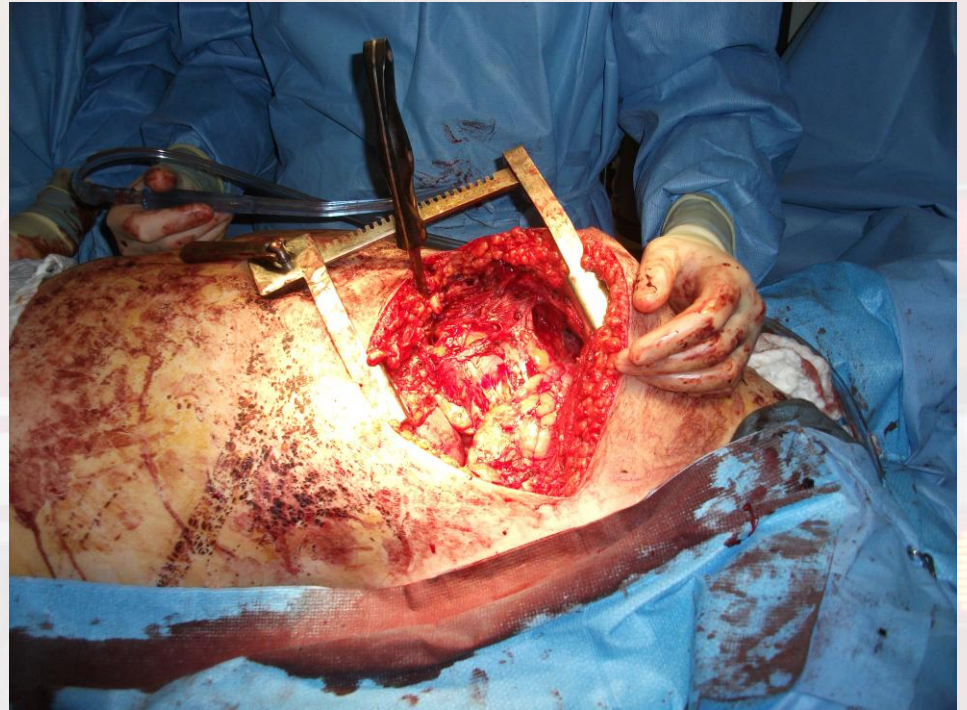
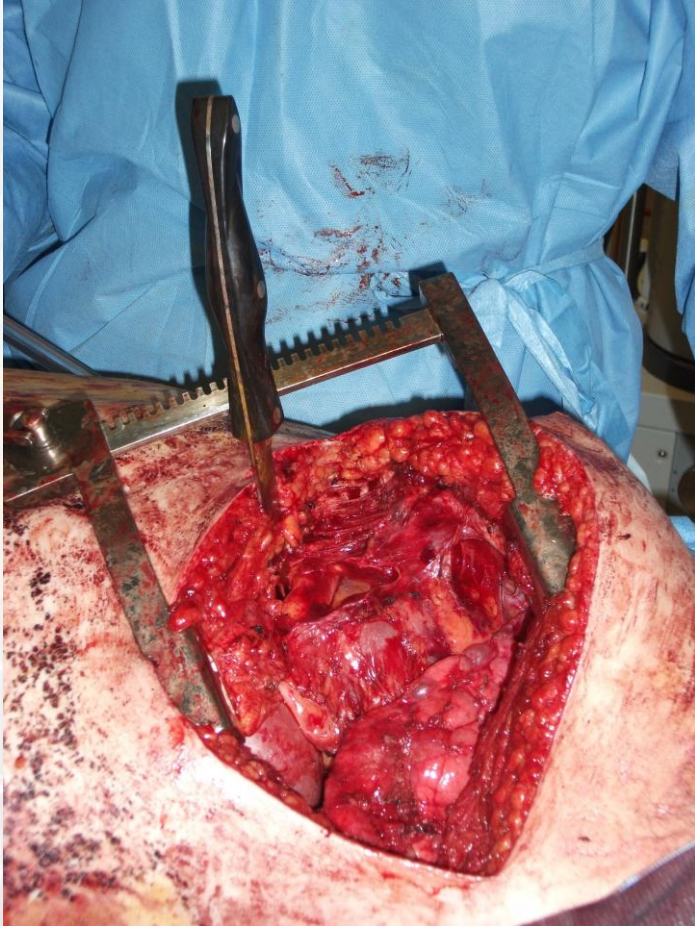
Anterior abdomen



# Anatomy



# Anatomy

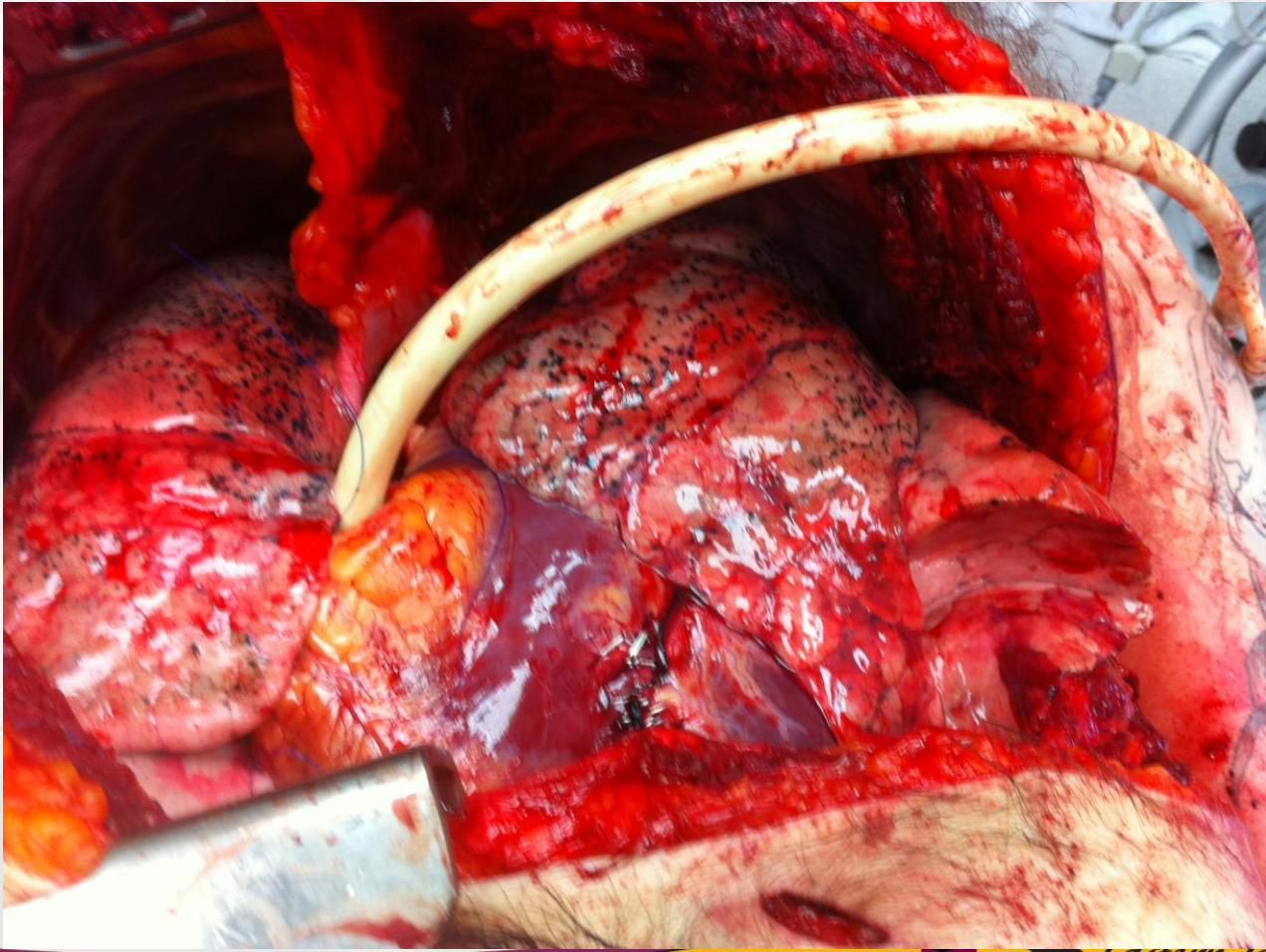




# Anatomy

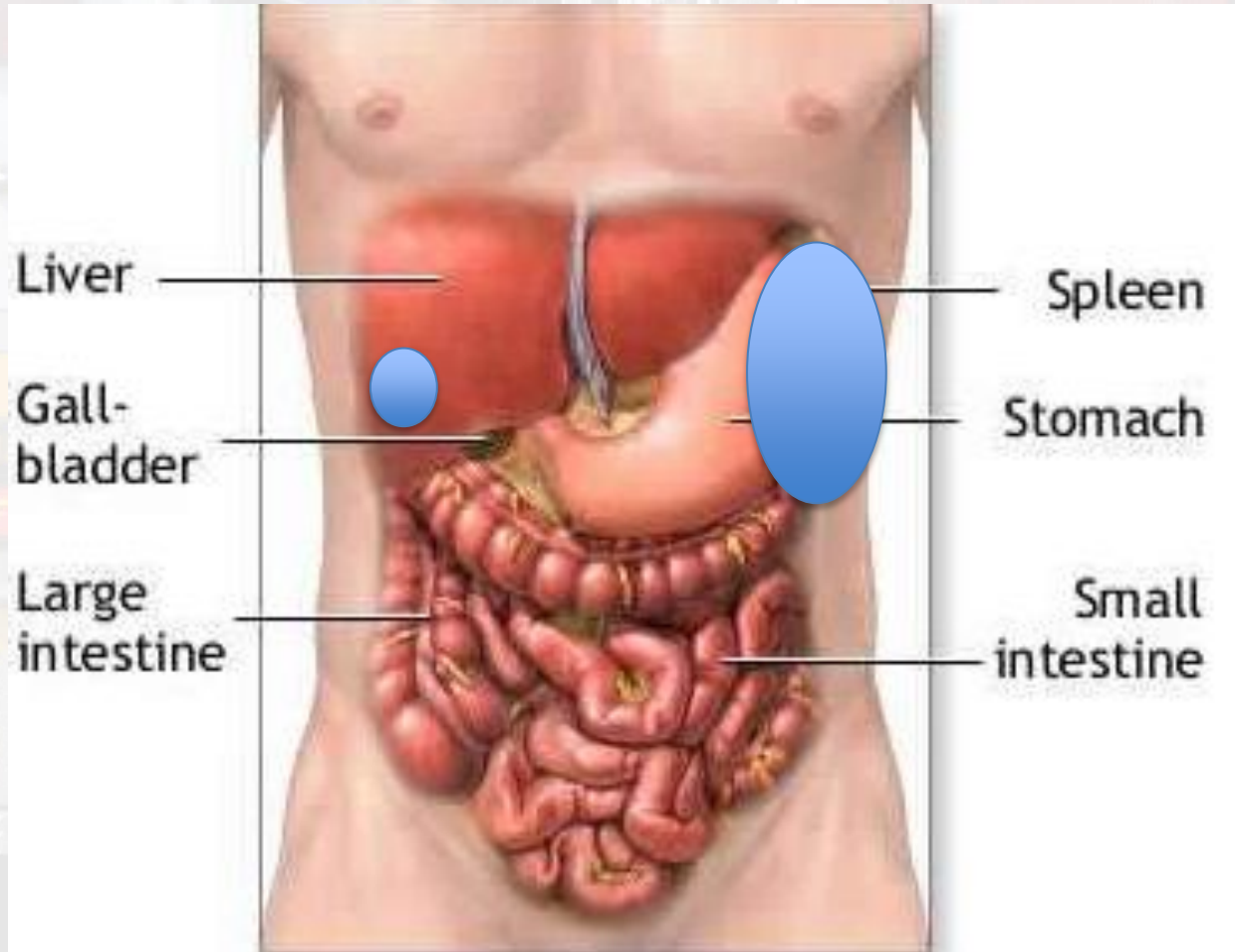


# Anatomy





# Anatomy





# Anatomy

- Flank

# Anatomy



Flank



# Anatomy

- Back

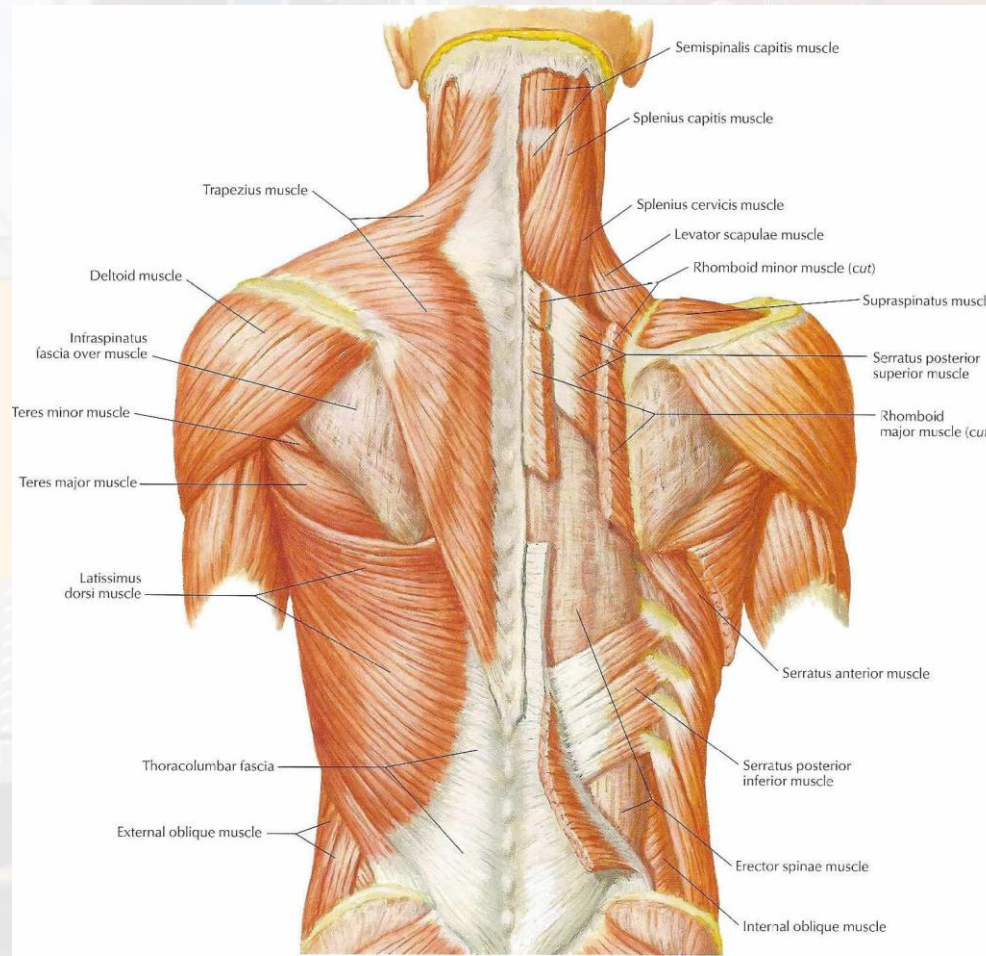


# Anatomy

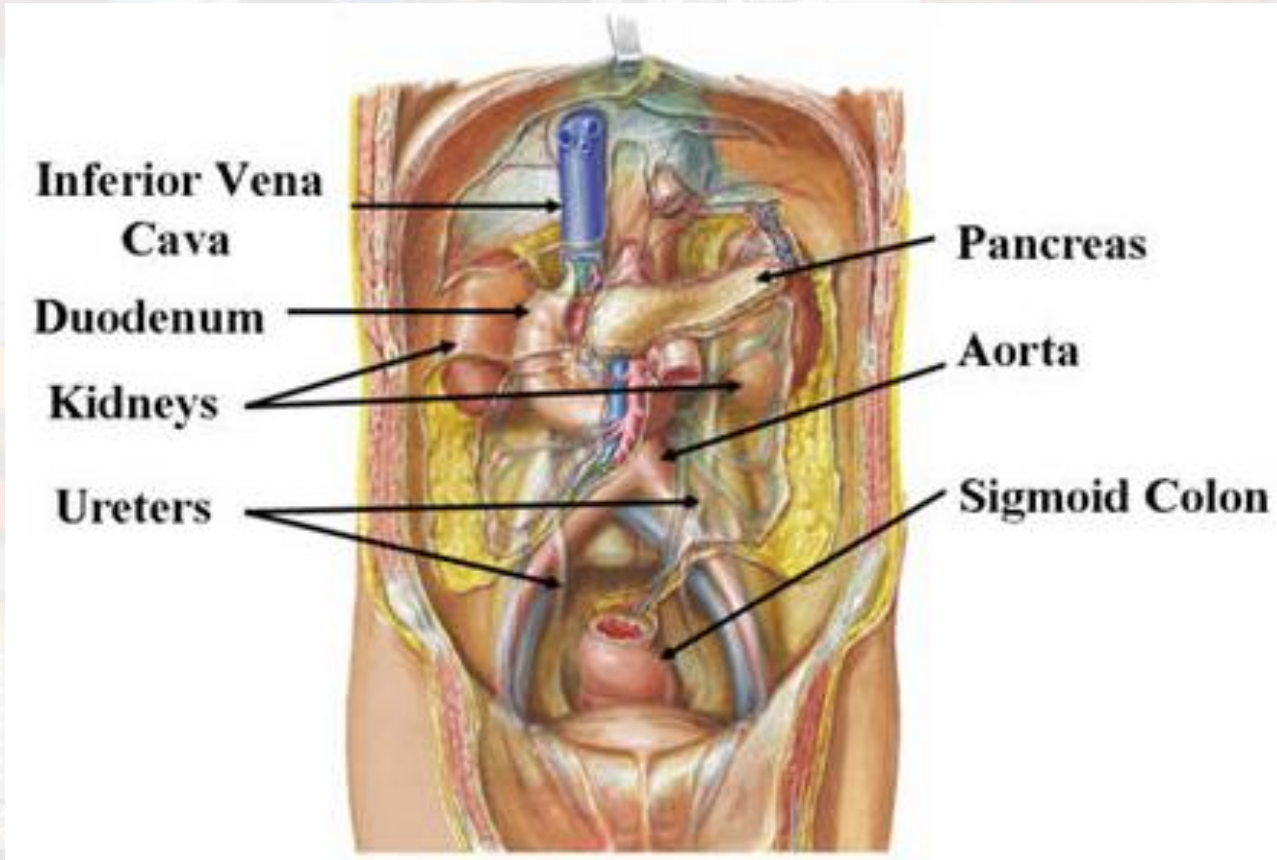


Back

# Anatomy



# Anatomy





# **RECOGNIZE PATIENTS AT RISK FOR ABDOMINAL TRAUMA**

# At Risk for Abdominal Trauma

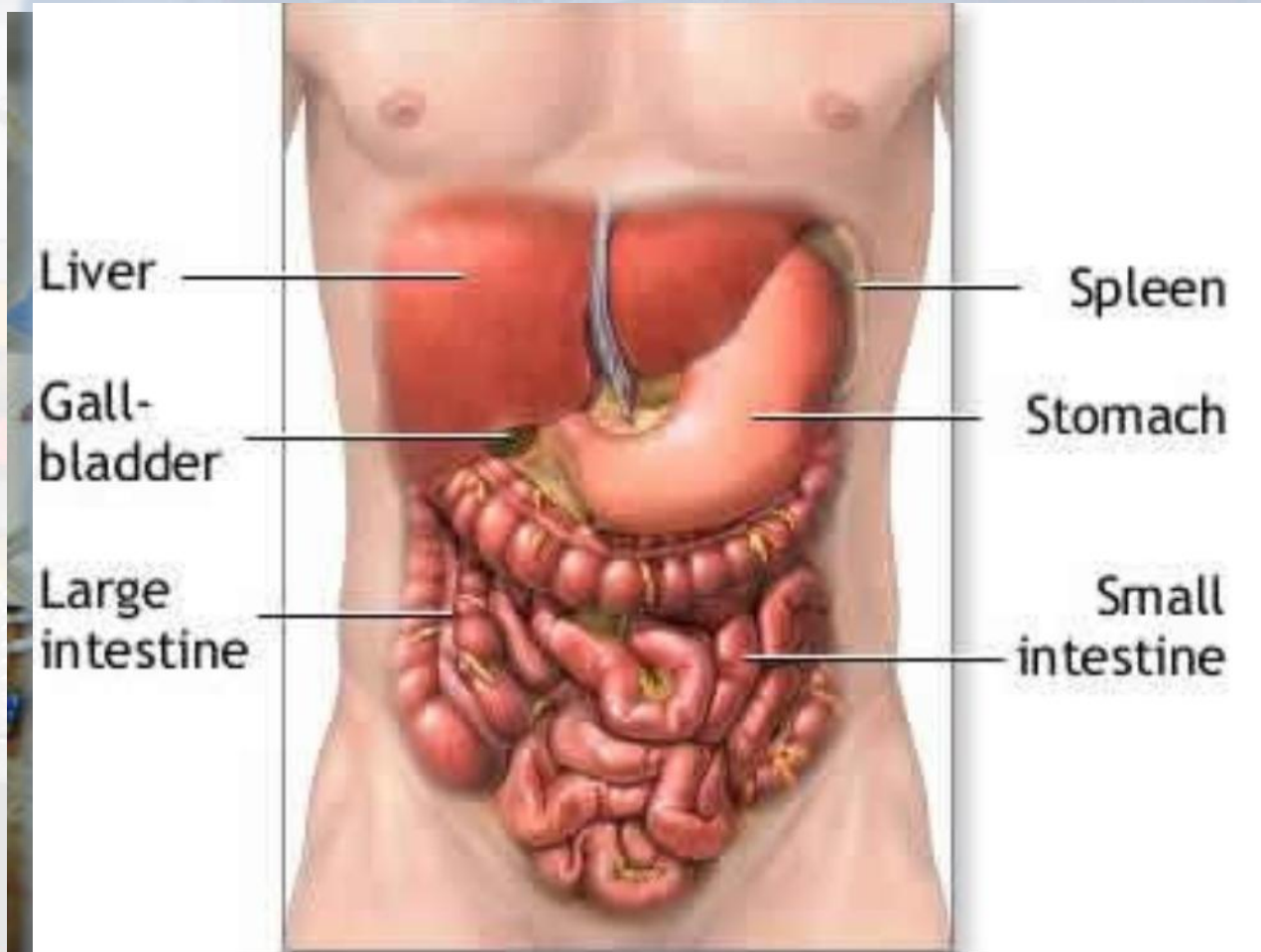
- When Should You Suspect an Abdominal Injury?
  - Blunt Injury
    - Speed of Travel
    - Point of Impact
    - Intrusion
    - Safety Devices
    - Position
    - Ejection

# At Risk for Abdominal Trauma



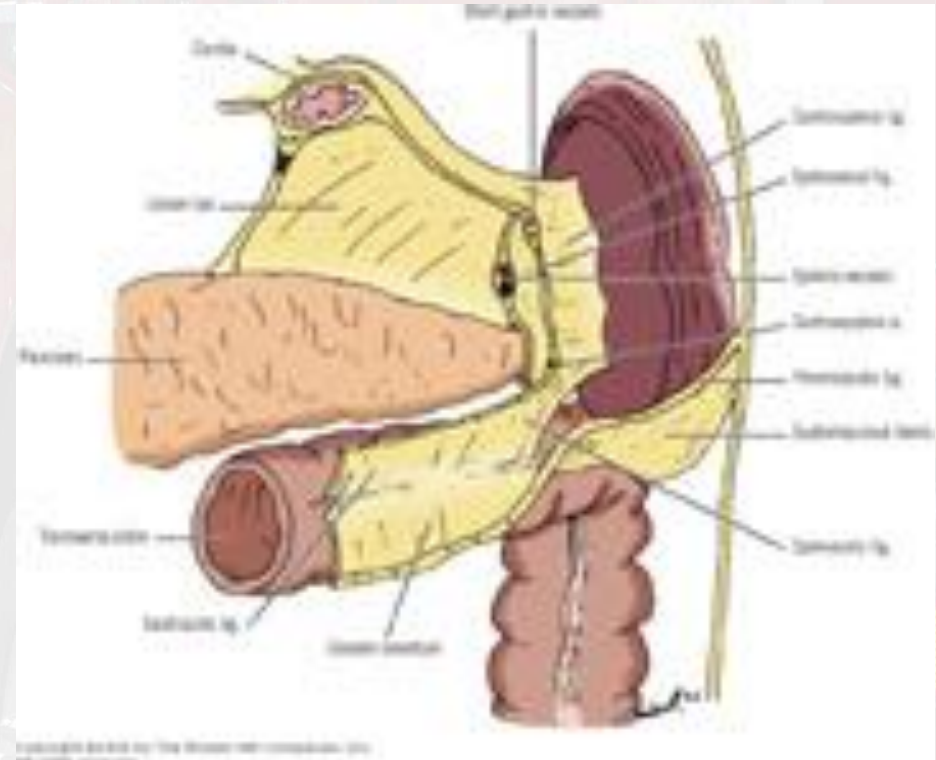


# At Risk for Abdominal Trauma



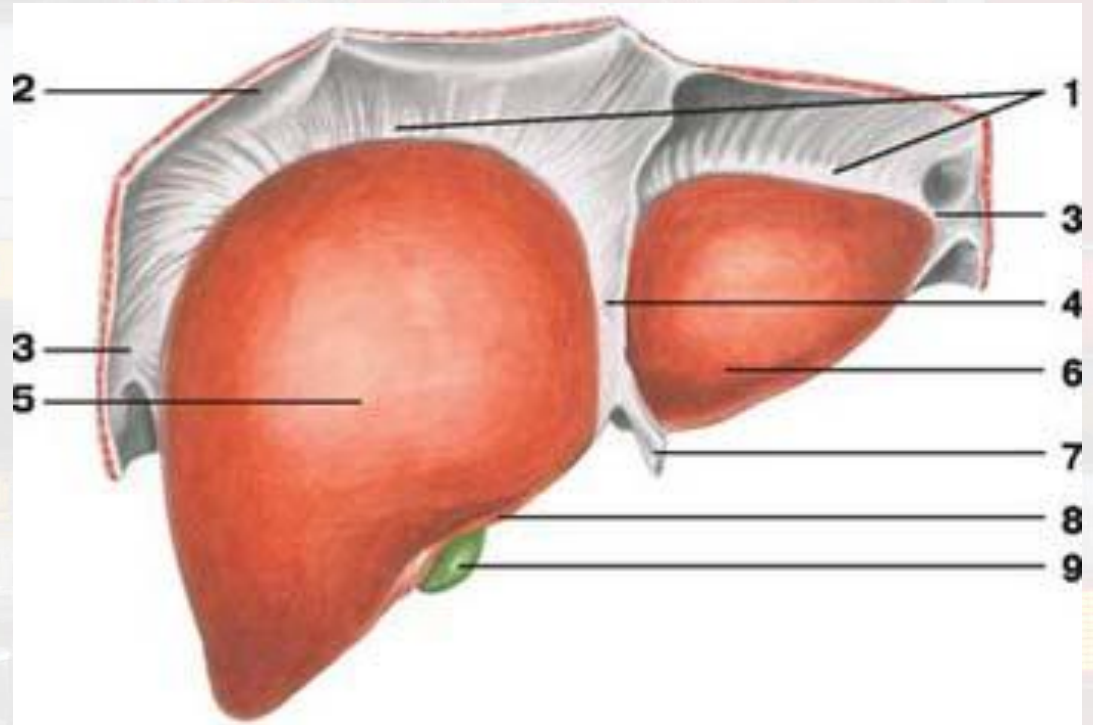
# At Risk for Abdominal Trauma

- Common Injuries
  - Spleen



# At Risk for Abdominal Trauma

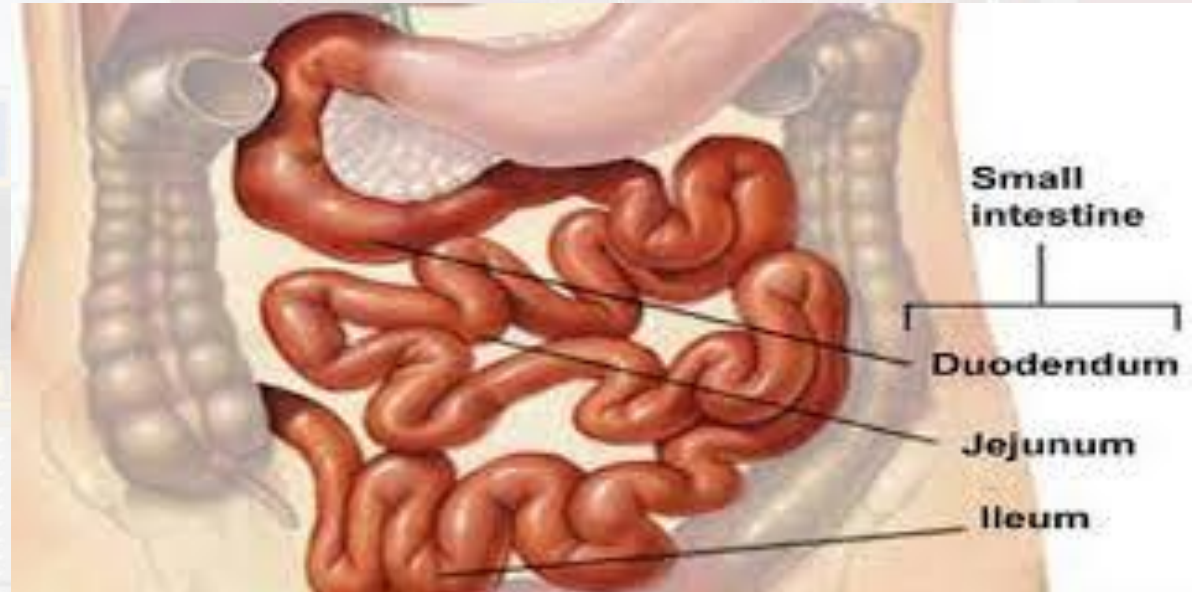
- Common Injuries
  - Spleen
  - Liver





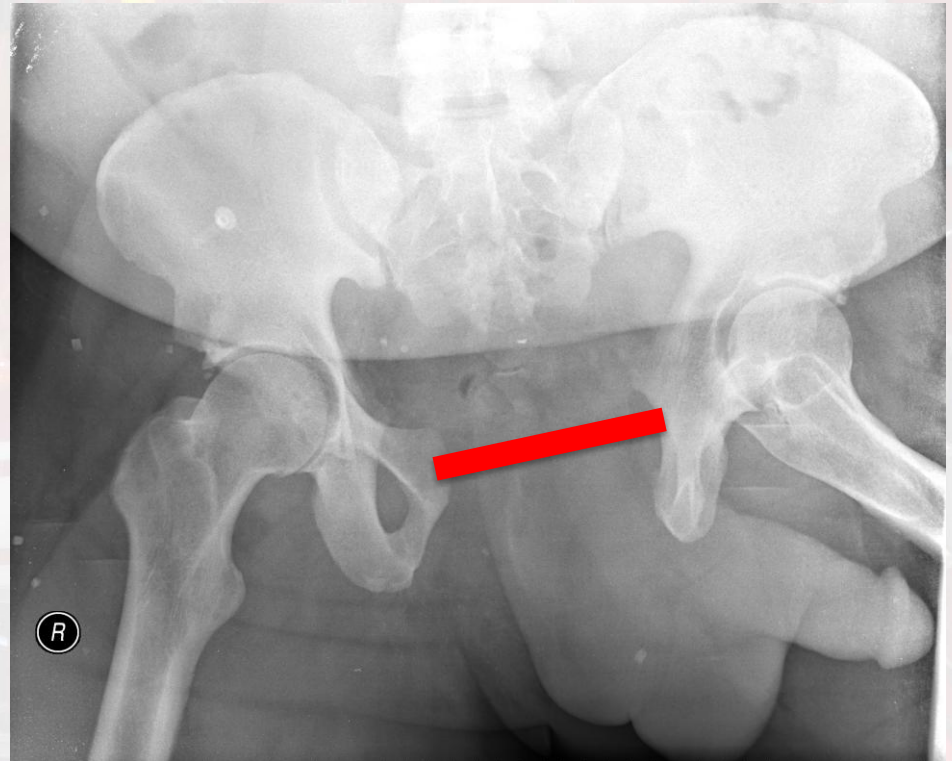
# At Risk for Abdominal Trauma

- Common Injuries
  - Spleen
  - Liver
  - Small Bowel



# At Risk for Abdominal Trauma

- Common Injuries
  - Spleen
  - Liver
  - Small Bowel
  - Pelvis





# At Risk for Abdominal Trauma

- When Should You Suspect an Abdominal Injury?
  - Penetrating Injury
    - Any organ is at Risk
  - Stab
    - Lacerations
    - Low Mechanism
  - GSW
    - Ballistics
    - Type of weapon
    - Shrapnel
    - Distance





# At Risk for Abdominal Trauma

- When Should You Suspect an Abdominal Injury?

- Explosion Blast

- Combination Injury
- Blunt
- Penetrating
- Blast

Consider proximity,  
Enclosed space, Fragments



# At Risk for Abdominal Trauma

- How do I recognize if there is an abdominal Injury?
  - Physical Exam
    - Inspection
    - Auscultation
    - Percussion
    - Palpation
    - Examine the Pelvis and Perineum



# At Risk for Abdominal Trauma

- Factors That Compromise the Abdominal Exam
  - Alcohol and other drugs
  - Injury to the brain and spinal cord
  - Injury to the ribs, spine, and pelvis
  - Distracting injury



# ACUTE MANAGEMENT OF ABDOMINAL INJURY

# **Managing Abdominal Injury**

**Unrecognized abdominal injury  
continues to be a cause of  
preventable death**

# Managing Abdominal Injury

- **ABCDE**



# Managing Abdominal Injury

- **ABCDE**

# Managing Abdominal Injury

- High Index of Suspicion



# Managing Abdominal Injury

- Blunt Mechanism
  - Recognition
  - Load and Go!
  - 2 large bore IV's
  - Fluid Resuscitation

Operating Room!



# Managing Abdominal Injury

- Penetrating Inj.
  - Stabilize foreign Objects
  - Moist dressings over viscera
  - Load and Go
  - 2 Large bore IV's
  - Fluid Resuscitate



Operating Room!

# Objectives

- Discuss EMS Trauma Alert Report (hand off)
- Identify Key Anatomic Regions of the Abdomen
- Recognize the organs at risk for injury
- Recognize Patients at Risk for Abdominal Trauma
- Identify the acute management of abdominal Injury

**Thank You!!!**



# **Real World Trauma to the Abdomen**

**9/24/2013**

Dr. Michael L Lemon, DO