Firefighter Pre-Hospital Care Program
Module 12

Abdominal Emergencies
After reviewing the course materials and after completing the post-course test, the participant will have demonstrated an appropriate level of understanding about how to:

• accurately assess a patient experiencing an abdominal illness

• determine priorities related to abdominal illnesses

• provide emergency patient care in a safe manner, consistent with local standards and Base Hospital direction

• evaluate the effectiveness of treatment measures

• perform ongoing assessments and interventions in response to the patient’s presentation, changing treatment requirements and environmental variables
The Abdomen

- The abdomen is a major body cavity.
- It contains the organs of digestion and excretion.
- It is separated into 4 quadrants
- Pain in a particular quadrant provides important clues to certain injuries or diseases
Deep in the Abdomen are Organs of the Genitourinary System

- Kidney
- Adrenal Gland
- Inferior Vena Cava
- Aorta
- Rectum (cut view)
- Bladder
- Urethra

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Anatomy of the Genitourinary System

Anterior

Cross Section of the body

Posterior

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Abdominal Pain

- Common complaint
- Cause is often difficult to identify
- It is not necessary to determine cause
- Need to recognize life-threatening problems and act swiftly
Terminology

Peritoneum
- thin membrane lining the entire abdomen

Peritonitis
- pain and irritation (inflammation) of the peritoneum

Acute Abdomen
- sudden, severe onset of abdominal pain
- some causes of severe abdominal pain can be fatal
Terminology

Aneurysm
- Bulging, weakening of the a blood vessel; usually the aorta

Hernia
- Protrusion of organs through a hole in the body wall
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Injuries to Abdomen
Closed Abdominal Injuries

• Caused by blunt force trauma such as striking the steering wheel or improper wearing of a seatbelt

• Involves injury to the abdomen without breaking the skin

• Serious injuries may be hidden inside
Closed Abdominal Injuries

Possible Injuries:

• Laceration of the liver or spleen

• Rupture of the intestine

• Rupture or avulsion of the kidneys

• Rupture of the bladder, especially if the patient had a full or distended abdomen at the time of injury

• Internal bleeding

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Open Abdominal Injuries

- Identified when a foreign object enters the abdomen and opens the peritoneal cavity to the outside

- Also known as penetrating injuries

- Always maintain a high level of suspicion for unseen injuries such as spinal cord injuries and damage to internal organs
Referred Pain

- is a perceived pain in the body that can “fool” the brain into sensing pain at a distant location

Examples include:

- Shoulder pain caused by internal abdominal bleeding
- Arm or jaw pain due to a heart attack
Acute Abdomen

- Nearly every kind of abdominal problem can cause an acute abdomen
- Will result in emergency surgery and/or hospital admission
Examples of Acute Abdomen

- Perforation of an ulcer
- Gallstones that lead to inflammation (cholecystitis)
- Inflammation of the pancreas (pancreatitis)
- Inflammation or infection of appendix
- Inflammation of pouches in large intestine (diverticulitis)
- Bowel Obstruction
Urinary System

- Kidneys can be affected by stones that form from materials normally passed in the urine.
- Kidney stones cause severe back or abdominal pain.
- Kidney infections can cause severe pain.
- Patients with infections are often quite ill, with a high fever.
Signs and Symptoms of an Acute Abdomen

Patients will have some or all of these findings:

- Severe pain

- When palpating the abdomen with increasing pressure, the abdomen will be firm or hard

- Pain will increase as pressure from palpation is released

- Low blood pressure (hypotension), fast heart rate (tachycardia), high fever (febrile)
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Treatment for Abdominal Emergencies
Treatment for Abdominal Emergencies

- Complete a full primary assessment
- Administer supplemental oxygen at 10 L/min via non-rebreathing mask.
- Place patient in a position of comfort
- Obtain a detailed history
Focused Assessment

- Explain what you are about to do
- Determine if movement causes pain and if distention is present
- Palpate the four quadrants of the patient’s abdomen gently
Focused Assessment

• Determine whether patient can relax abdomen on command

• Determine whether abdomen is tender when palpated

• Palpate gently—rough palpation could cause further damage
Emergency Medical Care for an Acute Abdomen

- Take steps to provide comfort and lessen effects of shock; reassure patient
- Anticipate vomiting
- Position patients who are vomiting to maintain airway
- Be sure to use full P.P.E.
Emergency Medical Care for an Evisceration

- Never replace the organs
- Cover with a sterile dressing moistened with sterile water
Emergency Medical Care for an Evisceration

- Cover moistened dressing with an occlusive (will not allow air to penetrate) dressing

- Tape dressing on all four sides
For All Questions Pertaining to this Module,
Contact Your E.M.S. Command Coordinator.

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