



PHEC
for outdoor professionals

This Issue:

Abdominal and Pelvic pain
Signs and symptoms
Patient management
When to evacuate
Acute and Chronic conditions.

Many of us have experienced the isolation of travelling in a remote area. We are likely to want our party to stay accident free fit and well.

If one of your group becomes unwell with abdominal pain (the cause unknown) people will look to the person most experienced and most likely, that will be you!

The information below will build upon your knowledge and give some guidelines to assist in your decision making.

With regular practice of primary, secondary survey's and vital signs you can make a sound decision for any situation where it is a medical complaint of abdominal pain.

There are over one hundred causes of abdominal pain (Mistovich et al. 2000, p426) too many to detail here. We will discuss a selection of more common conditions. It is important to be aware that the area where the pain is felt will relate to a specific organ, but that site may be a referred pain site. Correct documentation of the pain site assists medical professionals to make quick diagnoses and treat correctly.

Patient Assessment

- Firstly rule out any likely traumatic mechanism of injury such as a penetrating wound or blunt trauma. Inspect the abdomen, check if it is distended (swollen) or if the skin colour has changed
- Ask the person to point to the pain.
- Palpate the individual quadrants gently (palpation can aggravate pain), start with the area of least pain and finish with the area of most pain.
- If the abdomen is rigid, ask the person if they can relax the muscles (if not it indicates inflammation of the abdominal wall)

The situation is considered serious if the pain has lasted for six hours or more, came on abruptly, if vomiting is continuous or there are symptoms such as low blood pressure, fainting, or pale, cool and clammy skin (signs of shock).

Patient Management will include:

- Monitoring the airway (there is a likelihood of vomit and/or unconsciousness).
- Making the patient comfortable.
- If they are showing signs of shock treat them for this (lie down and elevate the feet).
- Give oxygen if available at 10 litres/minute.
- Do not give any food, fluids or medication.
- Think ahead of any other complications, for example hypothermia and prevent the likelihood of this.
- And the decision to evacuate or not.

If you intend to move someone with severe abdominal pain, ideally you would use a stretcher. If they are able to walk, it will be at a very slow speed and any movement is likely to make their pain worse. If they are suffering from shock, they are highly likely to faint on standing and walking is not advised. In most situations you will need to create a camp/base where you are.

Signs and symptoms that call for evacuation:

- Poor general appearance.
- Unresponsive or responsive but not following commands.
- Fainting.
- Severe pain.
- Pain that continues for six hours or more.
- Continuous vomiting.
- Signs of shock (low blood pressure, fainting, or pale, cool and clammy skin).
- Signs of internal bleeding - vomiting blood (bright red or like coffee ground) or blood in the stool (bright red or dark and tarry).

“All patients with abdominal pain should be considered to have life threatening conditions until proven otherwise” (Mistovich et al, 2000, p 426).

Reference

Mistovich, J., Hafen, B. & Karren, K. (2000), Prehospital Emergency Care (6th Ed), Prentice-Hall Inc, New Jersey.



Acute Abdominal Conditions

Appendicitis - inflammation of the appendix.

A common condition (especially in 5-30 year olds) where the appendix becomes swollen, inflamed and progresses on to become infected. It usually occurs abruptly and is thought to be a result of intestinal matter infecting it or of the appendix twisting and cutting off the blood supply to the tissue

Signs and symptoms include:

- General abdominal pain around the belly button, increasing in intensity over 2 to 12 hours.
- Pain localising in the LRQ (lower right quadrant), at the site of the appendix.
- Nausea and vomiting.
- Elevated temperature (warm/hot to touch)

Rebound tenderness – pressure is applied at the pain site, however it intensifies when the pressure is released (Porth, 1998; Mistovich et al, 2000).

Food Poisoning

Common foods associated with food poisoning are chicken, rice, uncooked seafood and fish. The onset of symptoms can occur within 30 minutes or take as long as a few days depending on the cause. Symptoms usually settle down with 24-48 hours. If vomiting persists (causing dehydration) or if symptoms do not settle, medical attention should be sought.

The greatest risk of food poisoning is hypovolemic shock as a result of severe fluid and electrolyte loss. Small sips of water or an electrolyte drink should be given. Once nausea and vomiting subsides, clear liquids (fluid that you can see through) should be given for 12-24 hours, then bland food for a further 24-48 hours.

Signs and symptoms include:

- Abdominal pain.
- Nausea and vomiting.
- Gas and diarrhoea.
- Loud or frequent bowel sounds.
- Headache and/or fever.
- Signs of shock (due to fluid loss).

(Mistovich et al, 2000; Smeltzer & Bare, 2000;
www.emedicinehealth.com/food_poisoning)

Urinary Tract Infections (UTI)

As the name suggests, this is when a bacterial infection occurs in the urinary tract (tubes, bladder and in severe cases the kidneys (see below – pyelonephritis)). It is more common in women than men and some people may have no associated pain.

- Signs and symptoms include:
- Urinary frequency and urgency.
- A burning sensation and pain when voiding.
- Blood or pus in the urine.
- Mild fever. (Porth, 1998; Anderson, Anderson & Glanze 1998)

Bowel Obstruction

A blockage of the bowel (intestines), halting normal function and resulting in abdominal pain with the potential to block the blood supply to surrounding tissue, causing cell death. There are multiple causes of bowel obstruction including abnormal intestinal growths (including cancer), hernia's and inflammatory bowel conditions.

Signs and symptoms include:

- Pain initially 'crampy' and wavelike that may become more severe and constant with time.
- Distended abdomen.
- Vomiting.
- No bowel motions or passing gas, history of constipation.
- Signs of dehydration – thirsty, drowsy, achy, lethargic
- Signs of shock.

Chronic Abdominal Conditions

Ovarian Cyst/Poly-cystic ovary syndrome (PCOS)

Cysts (closed sacs containing fluid and tissue cells), can grow anywhere within the body. If ovarian cysts rupture, they cause severe pain and inflammation in the abdomen and pelvic cavities and there is a risk that an infection could develop. Some women are diagnosed with PCOS, which means they have multiple ovarian cyst growth.

Signs and symptoms of a ruptured cyst include:

- Severe lower abdominal pain.
- Mimicking the signs and symptoms of appendicitis and ectopic pregnancy (see above).
- Abdominal swelling

Gastroesophageal Reflux - Gastric Reflux

This condition occurs where gastric content move from the stomach up into the esophagus causing severe pain and inflammation. It is often described as 'heartburn' and typically lasts for 30 to 60 minutes after eating or it occurs during the night when lying flat.

A person diagnosed with this condition will take regular medication to relieve the symptoms or will have medication to take if symptoms occur (ie. antacids).

Signs and symptoms include:

- 'Heartburn' – severe pain made worse by bending.
- Central chest pain (sternum region) with pain radiating up the throat, shoulder or back.
- Belching (Porth, 1998)

Stomach Ulcer/Peptic Ulcer

The word ulcer describes a wound/sore that has been caused by cell death (necrosis) due to inflammation, infection or disease of the tissue. It is painful and can often cause severe bleeding or perforation (opening) of the surrounding tissue.

Anti-inflammatory medication such as neurofen and ibuprofen are known to cause irritation of the gastric lining that may result in stomach ulcers.

Signs and symptoms include:

- Sudden onset of pain in the LUQ, often described as burning or gnawing. This pain often occurs while stressed or before meals.
- Nausea and vomiting.
- Peritonitis (see above) and associated rigid abdomen.
- Signs of internal bleeding - vomiting blood (bright red or like coffee ground) or blood in the stool (bright red or dark and tarry).
- Signs of shock (due to blood loss)

Hernia/Herniation

A weakness in the abdominal wall (peritoneum) causing the intestines to protrude. It often occurs as the result of heavy lifting. While the condition itself is not life threatening, there is a risk of the intestines being pinched causing a bowel obstruction.

Signs and symptoms include:

- Sudden onset of abdominal pain (usually coinciding with heavy lifting/straining).
- Fever.
- Rapid pulse.
- Signs and symptoms of a bowel obstruction. (Mistovich et al. 2000)

Mistovich, J., Hafen, B. & Karren, K. (2000), Prehospital Emergency Care (6th Ed), Prentice-Hall Inc, New Jersey.

Porth, C. (1998), Pathophysiology: concepts of Altered Health States (5th Ed), Lippincott-Raven Publishers, Philadelphia.

Smeltzer, S. & Bare, B. (2000), Textbook of Medical-Surgical Nursing (9th Ed), Lippincott Williams & Wilkins, Philadelphia.