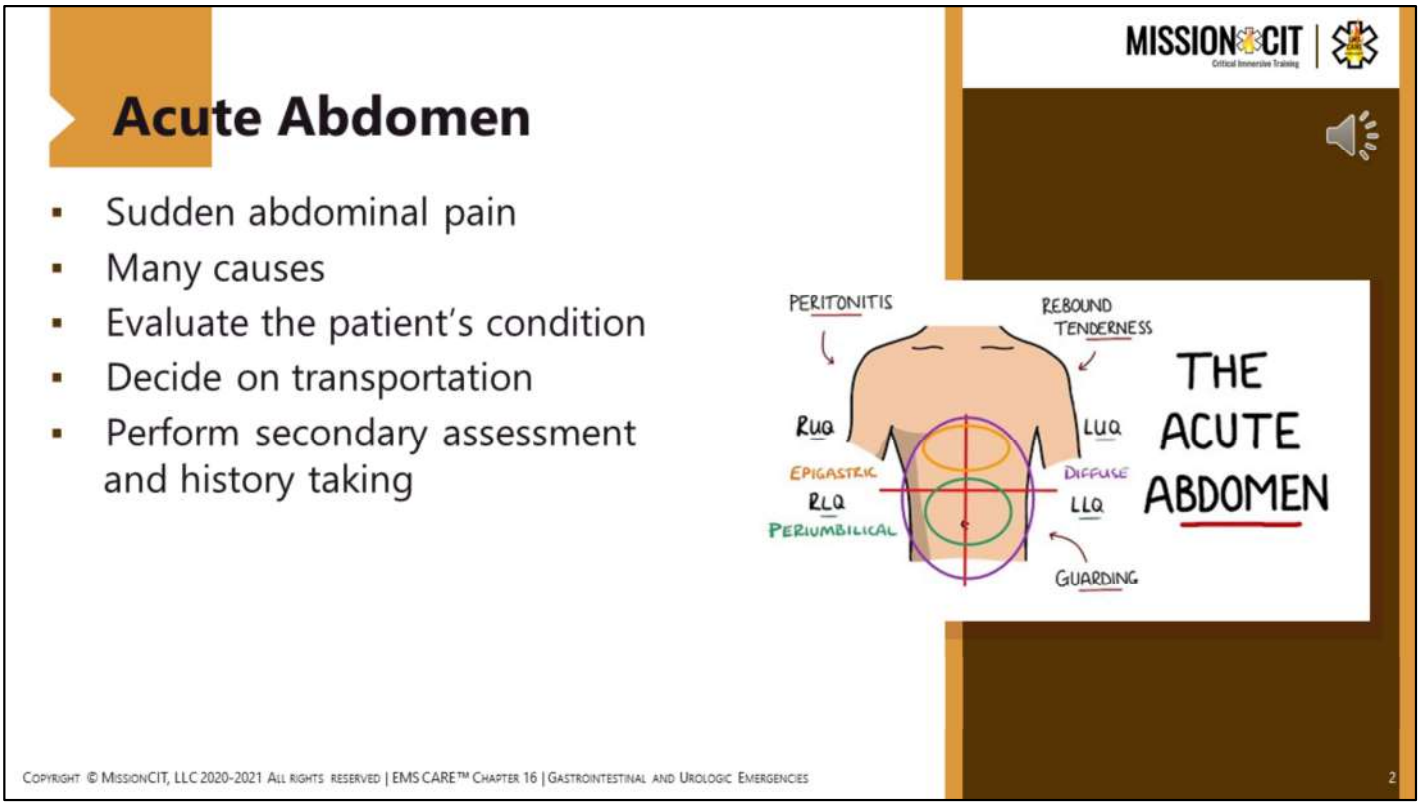



Thank you, Justin!

Welcome to this lesson where we talk about the different gastrointestinal disorders and emergencies, their signs and symptoms, and what you can do.



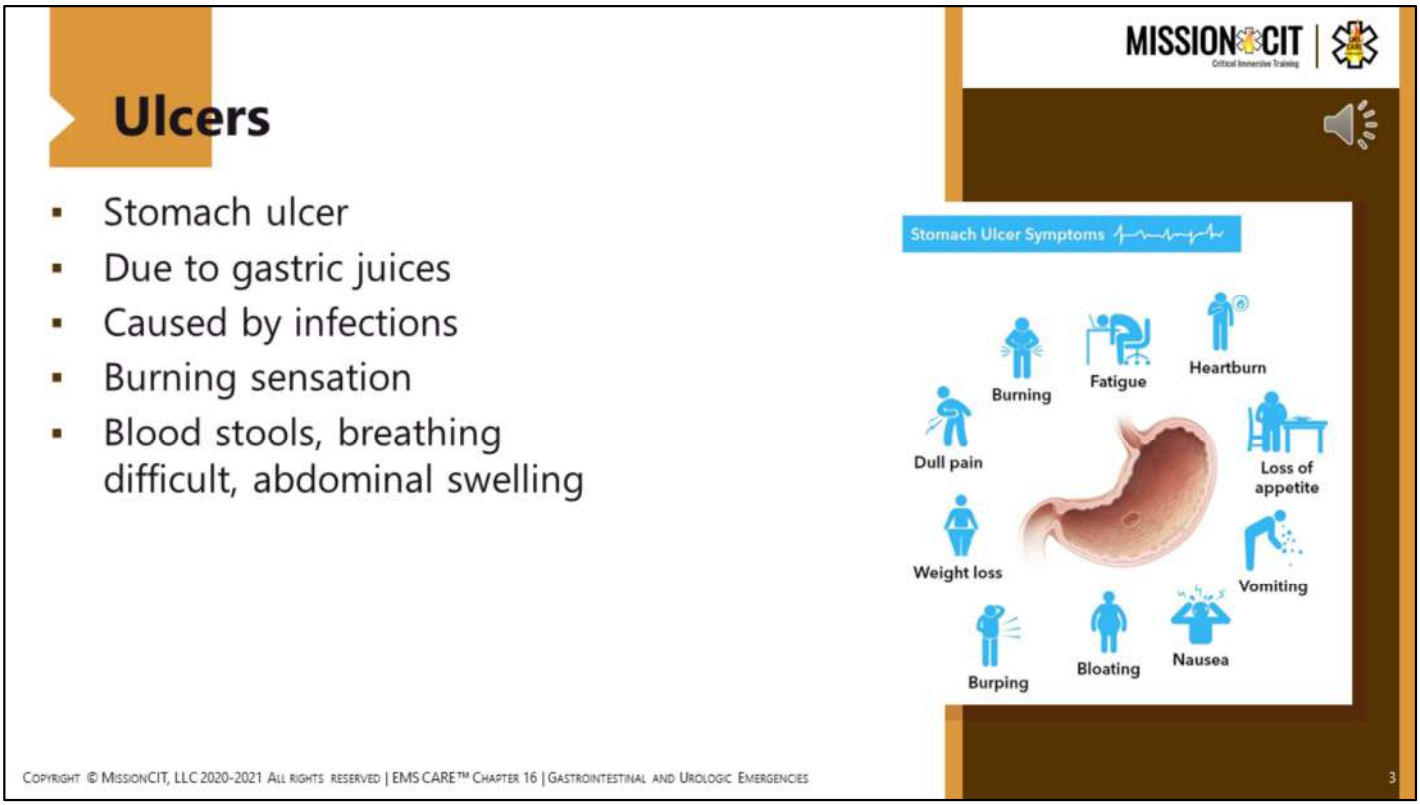

Acute abdomen refers to the sudden onset of abdominal pain and is often associated with severe and progressive problems in the abdomen. Many times, this can be an emergency and may even require surgery depending on the circumstances that cause it.

Often, the reasons for this pain are inflammation of appendicitis, diverticulitis, colitis, the stretching or distention of an organ like the obstruction of the intestine, blockage of a bile duct by gallstones, swelling of the liver with hepatitis, etc, due to the loss of the supply of blood to an organ.

Note that abdominal pain also can occur for unclear reasons without inflammation, distention, or loss of blood supply. An important example of this latter type of pain is irritable bowel syndrome (IBS). These latter types of pain are often referred to as functional pain because there are no recognizable or visible causes for the pain.

As an EMT, evaluate the patient's condition and the intensity of the pain and accordingly transport immediately.

If the pain is not severe and if the patient's life is not under threat, do a secondary examination to evaluate the cause of the abdominal pain.




A stomach ulcer is a sore that develops in the lining of the intestines, stomach, and esophagus, and typically occurs when the acids present in the stomach damage the lining of the digestive tract.

Ulcers that affect both the stomach and small intestine are called peptic ulcers. Stomach ulcers occur when the thick layer of mucus that protects your stomach from digestive juices is reduced. This allows the digestive acids to eat away at the tissues that line the stomach, causing an ulcer. Stomach ulcers may be easily cured, but they can become severe without proper treatment.

Stomach ulcers are almost always caused by an infection with the bacterium Helicobacter pylori and long-term use of nonsteroidal anti-inflammatory drugs such as aspirin, ibuprofen, or naproxen.

The most common symptom is a burning sensation or pain in the middle of the abdomen between the chest and belly button, which becomes more intense when the stomach is empty. It can last for a few minutes to several hours.

Transport the patient if he or she is unable to handle it. Also, it is an emergency if it is accompanied by bloody stools, breathing difficulty, abdominal swelling, persistent vomiting, and yellowish skin.




The gallbladder is the repository for bile, a gastric juice that handles digestion.

Sometimes, this bile hardens into stone-like deposits, and these are called gallstones. These deposits can range from fine grains to large balls.

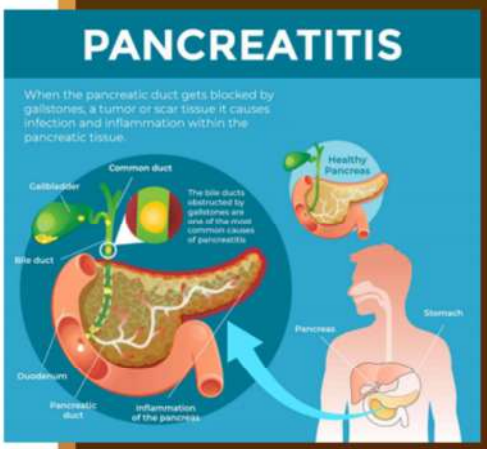
Most times, there are no signs that indicate the presence of these stones until they get moved to a duct and blocks it. This causes,

- Sudden and intense pain in the upper right part of your abdomen
- Back pain
- Pain in the shoulder
- Intense nausea

Most times, this is not an emergency, but transport the patient if you notice a high fever with chills and yellowish skin. Also, transport if the patient is unable to sit in a comfortable position.

# Pancreatitis

- Inflammation of the pancreas
- Gallstone
- Acute alcohol use




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Inflammation of the pancreas leads to a condition called pancreatitis.

The most common cause of acute pancreatitis is having gallstones, though acute alcohol use is also another cause. The pain can last from a few days to many years and is often accompanied by nausea and vomiting. The treatment requires hospitalization.

# Appendicitis

- Pouch-like structure
- Inflamed with pus
- Fever, vomiting, nausea, loss of appetite, and chills



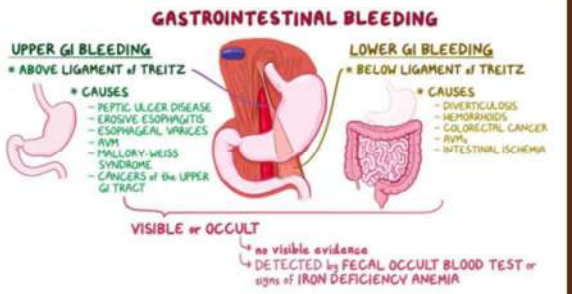

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A pouch-like structure called the appendix is attached to the opening of the large intestine and there is no known purpose. However, this structure can become inflamed with pus, leading to a condition called appendicitis. It starts with pain around the belly button and then moves to the lower right side of the abdomen.

It is often accompanied by fever, vomiting, nausea, loss of appetite, and chills. The common course of treatment is antibiotics and surgery within 24 hours of its diagnosis.

# Gastrointestinal Hemorrhage

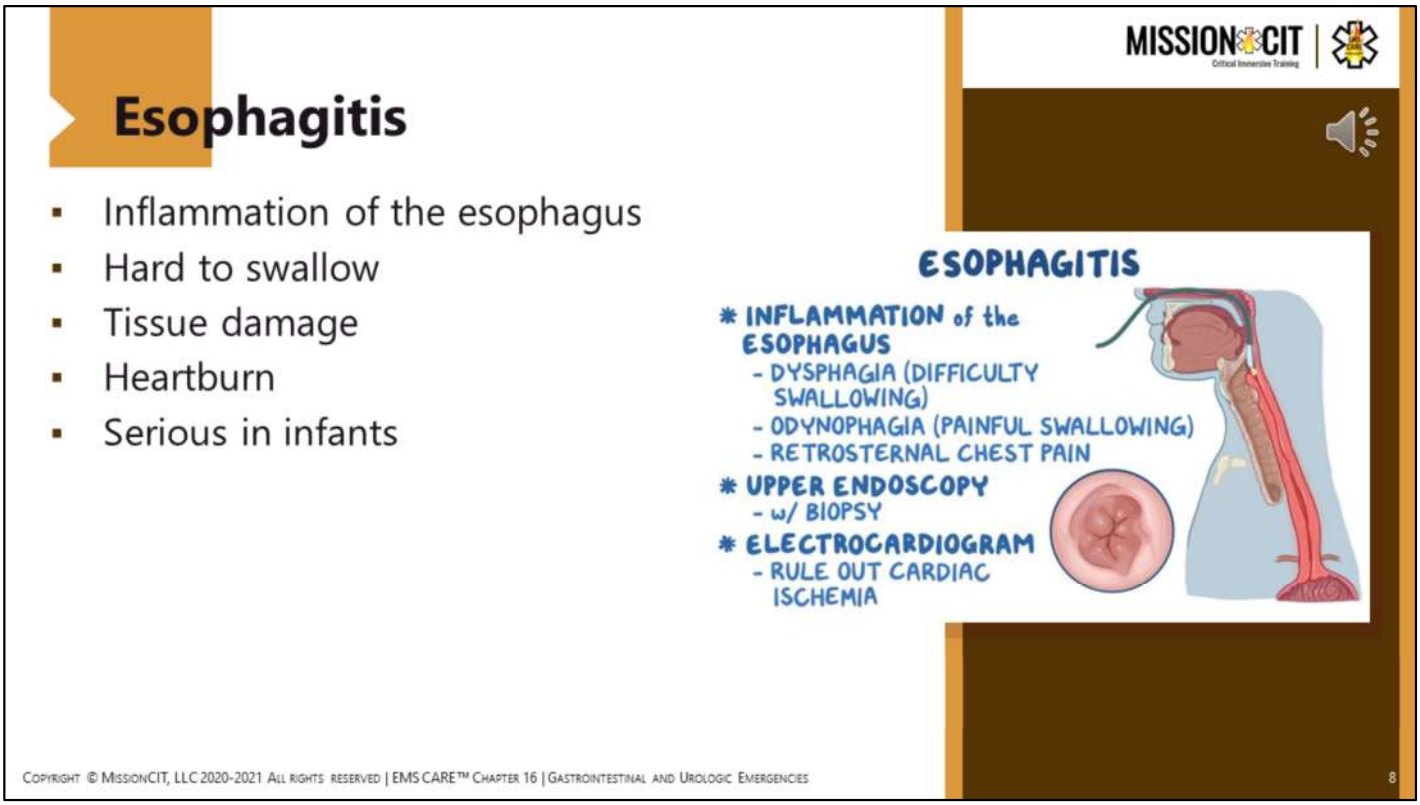
- All forms of bleeding in the GI tract
- Vomiting of red/black blood
- Black, bloody, or tardy stool
- Chest or abdominal pain
- Fainting
- Shock




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Also known as GI bleed or GI hemorrhage, this encompasses all forms of bleeding in the GI tract, starting from the mouth to the rectum. Along with pain, this condition is accompanied by the vomiting of red or black blood, bloody stool, and black or tarry stool. The amount of bleeding can be mild to life-threatening, and this is one of the reasons that can define the need for emergency transport. The eventual treatment would also depend on the cause and source of bleeding.

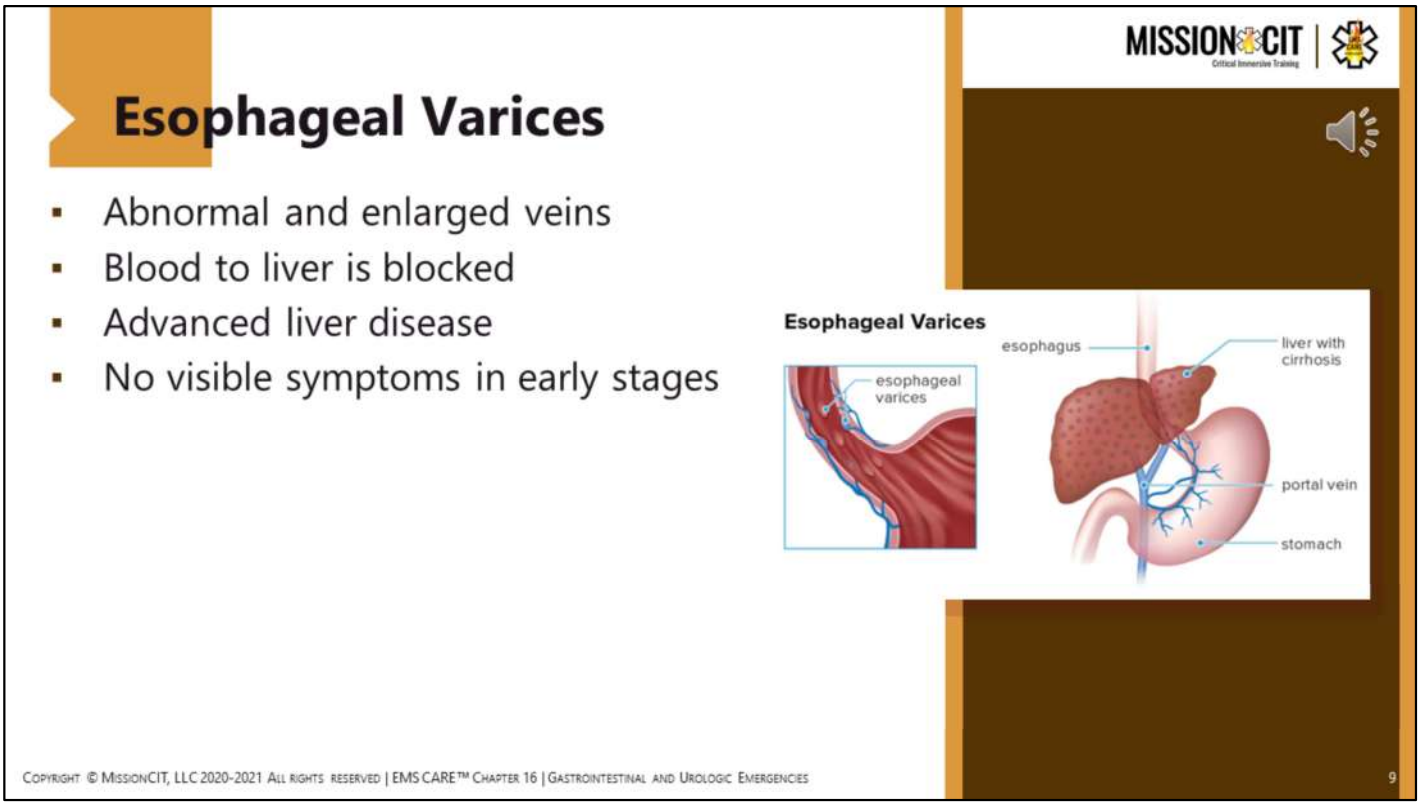
Many times, patients find it hard to breathe, have chest or abdominal pain, fainting, and are in shock. Those are conditions to look out for to determine emergency transport.




Esophagitis is an inflammation of the esophagus. It can be painful and make swallowing hard coupled with chest pain. The most common cause is the upward movement of stomach acid that can severely damage the tissues and make it difficult for food and liquid to travel from the mouth to the stomach.

While this is not a serious condition, it can cause some breathing difficulty for the patient due to the upward reflux and is often accompanied by uncomfortable heartburn and acid regurgitation.

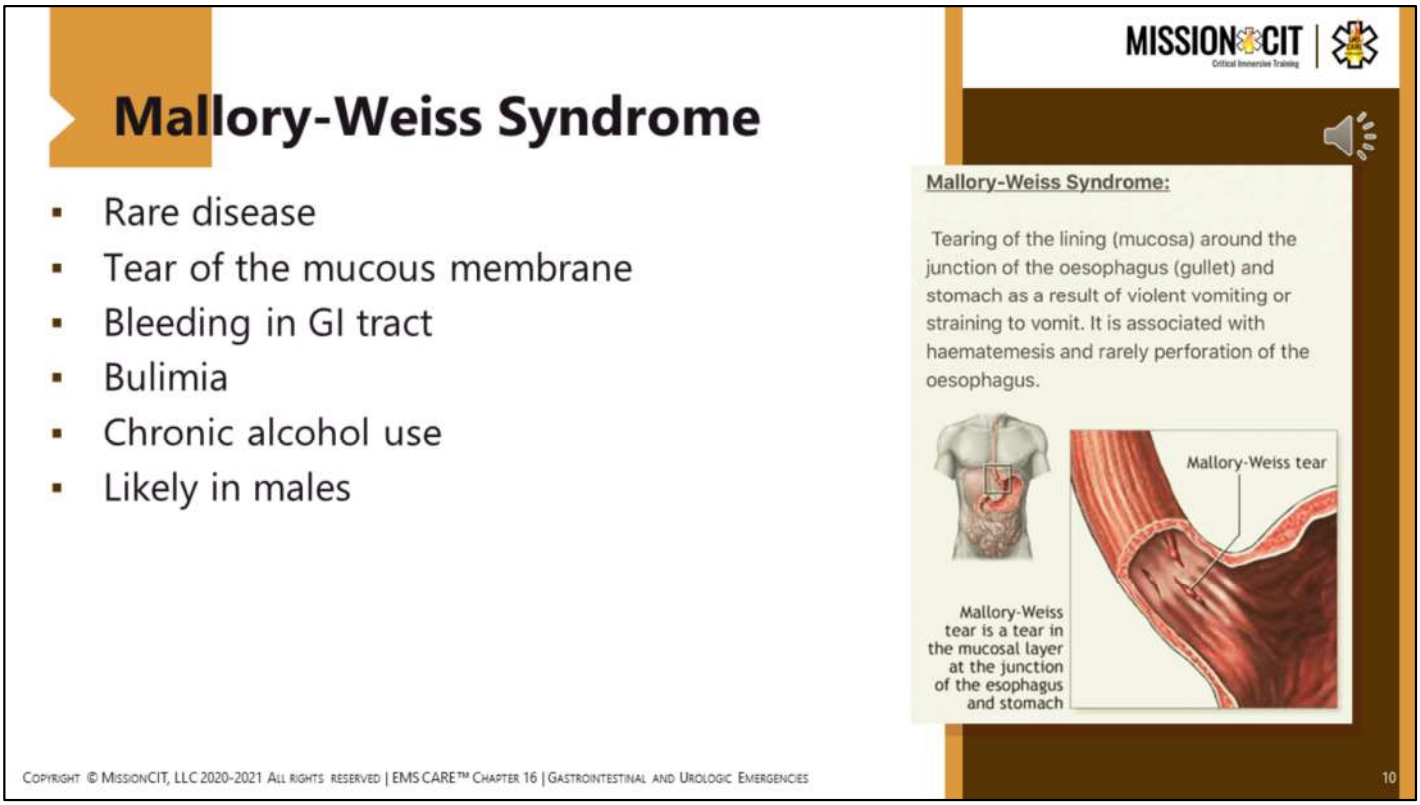
However, it can be serious in infants as it causes feeding difficulties and possibly even the chances to live.




Esophageal varices are abnormal and enlarged veins in the lower part of the esophagus. It usually develops when blood flow to the liver is blocked, and often occurs in people with advanced liver disease.

Most times, there are no associated symptoms. But extreme cases can involve blood vomit, bloody and tarry stools. In severe cases, it can even lead to shock.

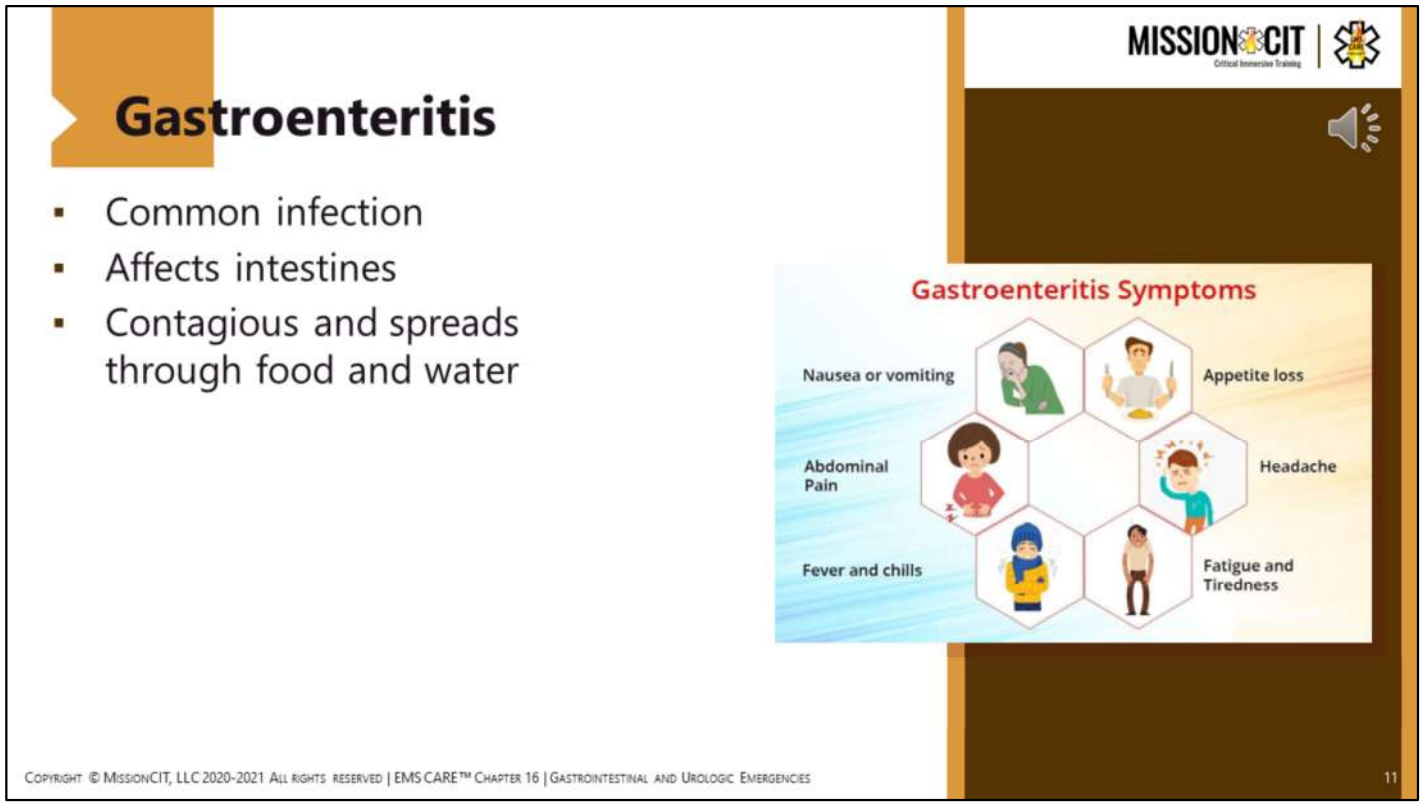
There isn't much you can do in a prehospital setting, so check if it's an emergency, and transport the patient.




Mallory-Weiss syndrome is a rare disease. It is a tear or laceration of the mucous membrane, mostly at the point where the esophagus and the stomach meet, resulting in severe bleeding from the gastrointestinal tract. The immediate cause of the lesion is usually a protracted period of vomiting.

This disease often occurs due to chronic alcohol use or bulimia, a life-threatening eating disorder, and tends to be more common among males than females.

Other rare but possible causes include chest or abdominal trauma, prolonged hiccups, intense coughing, heavy lifting, and convulsions.



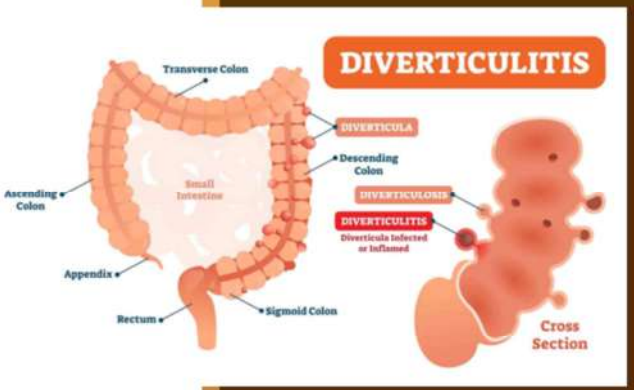

Gastroenteritis is a common infection of the intestines due to viruses or bacteria. Along with abdominal pain, it is accompanied by diarrhea, cramps, fever, and vomiting.

Also called stomach flu, it is contagious and spreads from infected people to others through contaminated food or water. Most times, the symptoms last for a day or two, though in some severe cases, they can persist for more than 10 days.

Evaluate the patient for dehydration and the severity of the infection, before deciding on emergency transport.

# Diverticulitis

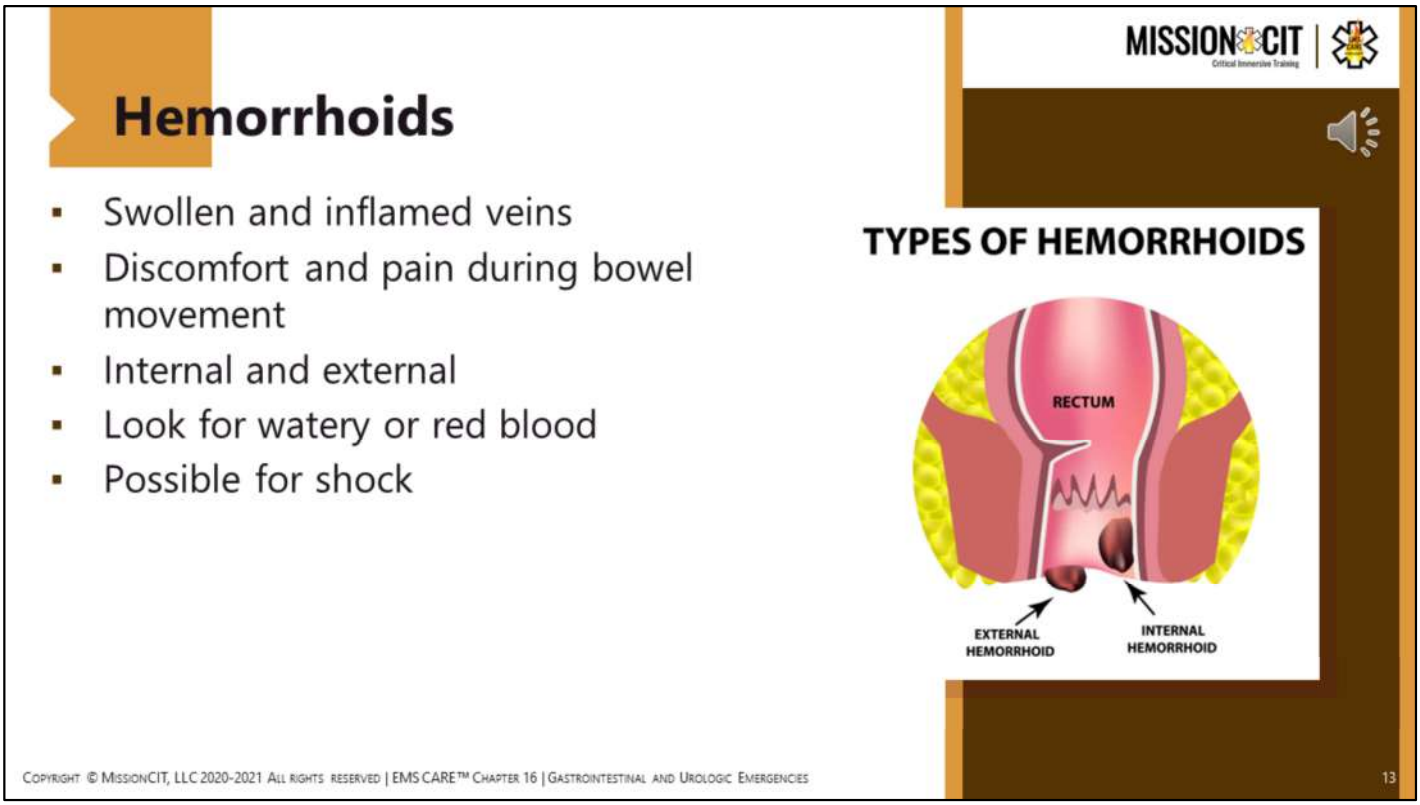
- Inflammation of stomach pouches
- Mild – Treated with antibiotics
- Severe – Surgery required




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Diverticulitis is an inflammation or infection of one of the many pouches present in the digestive tract. These pouches are bulges from your colon wall and are called Diverticula. Most times, there are no symptoms, and the mild versions are treated with antibiotics. Surgery is required if it becomes severe.

It is more common after the age of 40 and is accompanied by abdominal pain, fever, nausea, and a change in bowel habits.

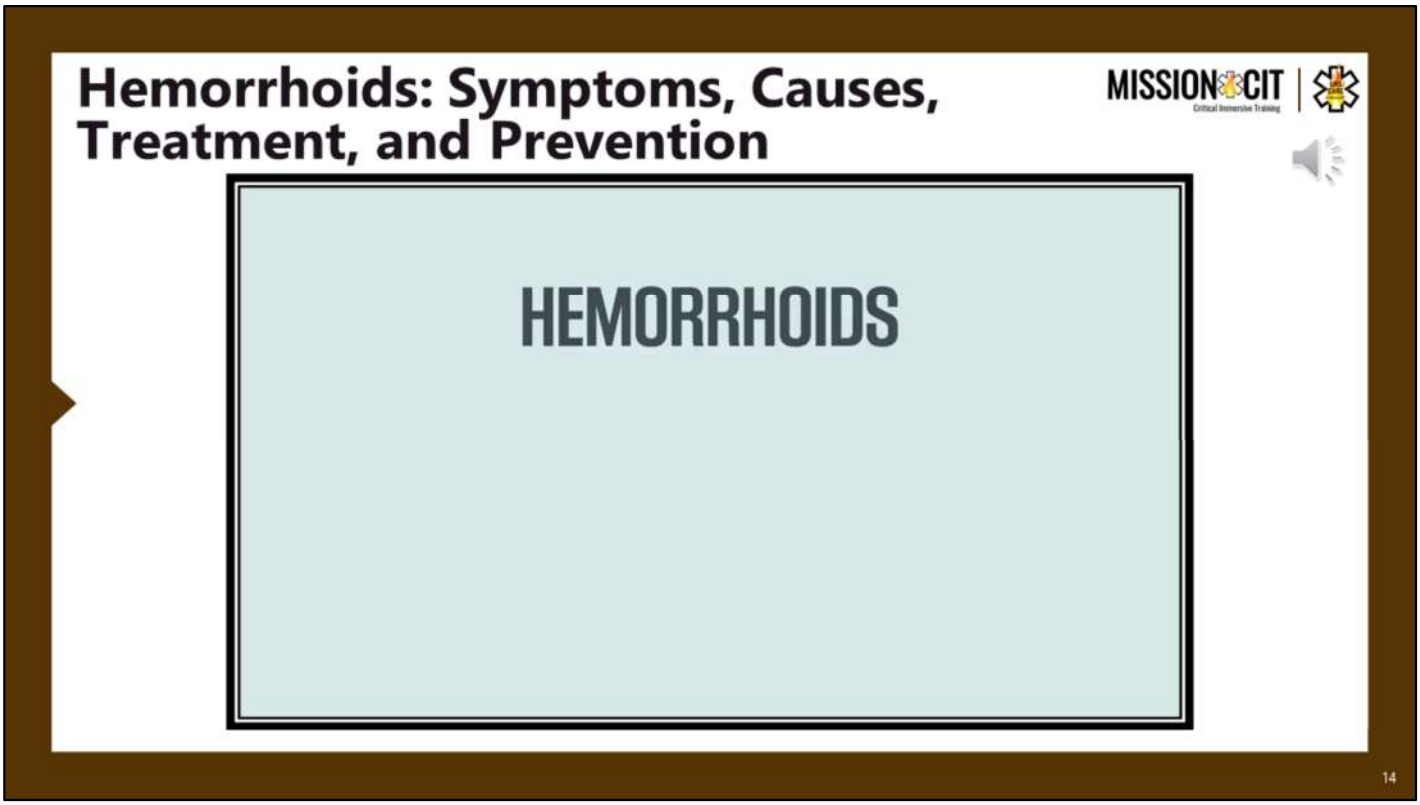



Hemorrhoids are swollen and inflamed veins in the rectum and anus that can cause bleeding and discomfort. It is often caused by straining during bowel movements, obesity, or pregnancy.

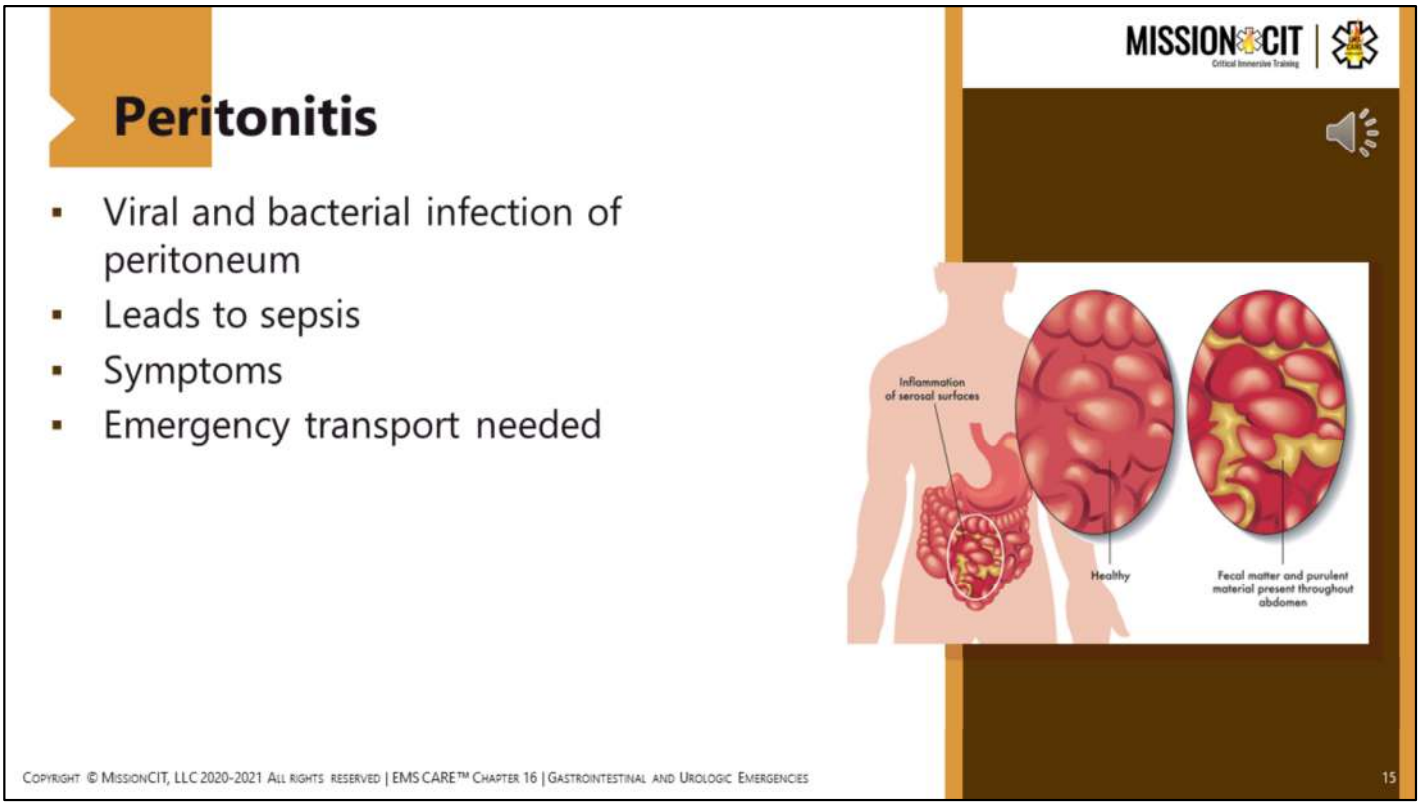
Discomfort is a common symptom, especially during bowel movements or when sitting. Other symptoms include itching and bleeding.

Internal hemorrhoids are usually painless but tend to bleed while external hemorrhoids may cause pain.

As an EMT, look for watery or bright red color blood as this indicates that the bleeding is happening closer to the end of the GI tract. In turn, this can cause the patient to go into a state of shock.




Want to get the quick facts about hemorrhoids? Watch this video to learn about signs, symptoms, causes, treatment, and prevention of hemorrhoids.




Peritonitis is the viral or bacterial infection of a lining on the inner walls of the abdomen called the peritoneum. This is a serious condition as it can lead to sepsis if left untreated.

At the same time, this condition is hard to detect because it starts with a set of symptoms that tend to be common across many disorders. However, the dull pain continues to be persistent and increases in intensity until the patient can bear it no longer. This is followed by fever, vomiting, chills, aches, and diminished frequency of urine and bowels.

These patients may require emergency transportation if possible or you can also request the services of an ALS or paramedic.

With this, we come to the end of this lesson, and in the next one, Justin will take you through the disorders of the urinary system.