

General Surgery & Surgical Oncology

Appendectomy (Laparoscopic/Open)

What is appendicitis?

Appendicitis is an inflammation of the appendix. The appendix is a small, fingerlike pouch located where the large and small intestines join. It has no known use. Inflammation is the body's reaction to irritation, injury, or infection. It causes swelling and pain.

It is important to get treatment for appendicitis before the appendix ruptures. A rupture is a break or tear in the appendix. If an infected appendix ruptures, infection may move into the abdomen. This can cause peritonitis, which is a dangerous infection of the lining of the belly. Peritonitis can be fatal if it is not treated right away.

Because of the risk of rupture, appendicitis is considered an emergency.

How does it occur?

In most cases inflammation of the appendix is caused by a blockage of the opening of the appendix by a piece of stool. It may also be a reaction to infection in the digestive tract.

What are the symptoms?

The symptoms are different from person to person but may include:

- abdominal pain, usually starting near the bellybutton, then moving to the right lower side of the belly
- loss of appetite
- nausea
- vomiting
- constipation or diarrhea
- trouble passing gas
- fever, usually not very high.

The symptoms of peritonitis are much more severe. The pain is worse and is felt throughout the abdomen. The abdomen may be swollen and feel tight or hard.

People under 10 or over 50 years old, as well as pregnant women, are less likely to have the usual symptoms of appendicitis. Because of this, they may not get treatment right away, which makes it more likely that their appendix will burst. It is very important for these people to be especially careful to report the early signs of appendicitis.

How is it diagnosed?

Sometimes it is difficult to diagnose appendicitis, especially in young children, older adults, and pregnant women. Your health care provider will review your symptoms and examine you.

You may have the following tests:

- blood tests
- urine tests
- chest x-rays (because pneumonia in the lower right lung can also cause abdominal pain)
- x-ray or ultrasound exam of your belly.

How is it treated?

If the diagnosis is not clear, you may be watched closely in the emergency room or hospital for 12 to 24 hours to see if surgery is necessary. In most cases the appendix must be removed. The operation is called an appendectomy.

Peritonitis is also treated with surgery and is a medical emergency. A person with symptoms of peritonitis needs to be seen in the emergency department as soon as possible.

A rupture of the appendix can also cause an abscess (infected sore) near the place where the appendix ruptured. If the appendix does rupture, the surgeon may put a drainage tube in the abdomen to let the infection drain for a few days after surgery.

Before surgery you will be given antibiotics. These may be continued 24 hours or many days, depending on whether your appendix ruptured and caused peritonitis.

For the first day or so after surgery, you may not be given anything to eat or drink. Then you will be allowed to have small amounts of water, later clear liquids, and finally some solid food until you are able to handle a regular diet.

Because health care providers cannot always be sure that the appendix is inflamed until they examine it during surgery, up to 15% of appendixes that are removed are not inflamed. However, it is appropriate for a provider to risk removal of a normal appendix so that he or she is sure to not miss a case of true appendicitis.

If your provider does not hospitalize you and sends you home without surgery, your provider will probably ask you to:

- Use no pain medicine. Taking pain medicine could make it difficult for you to know if the pain gets better or worse.
- Use no enema or laxatives because they increase the probability of rupture of the appendix.
- Take no antibiotics.
- Contact your health care provider if any changes occur in 6 to 12 hours.
- Bring a urine sample with you when you return in 24 hours or sooner for another exam.
- If you are returning for another exam, do not eat or drink anything on the day of your exam, in case you have to have surgery.
- Take your temperature every 2 hours and keep a record. Bring it with you when you return to see your provider.

If your health care provider sends you home, call your provider if any of the following occur:

- continued or worsening vomiting
- increased pain in the abdomen
- higher fever
- fainting
- blood in vomit or bowel movement.

How long do the effects last?

The usual stay in the hospital after an appendectomy is less than 4 days if your appendix did not rupture. If your appendix ruptured, you may stay in the hospital 7 days or longer. You can live a normal life without an appendix.

How can I take care of myself?

The most important factor in your recovery after surgery is following the full course of treatment ordered by your health care provider, including taking all of any prescribed antibiotics. To feel better as soon as possible you should:

- Rest.
- Get plenty of sleep but avoid staying in bed for long periods of time during the day.
- Eat foods high in protein while you are healing if your provider says it is OK.
- Eat small frequent meals.
- Gradually increase your walking and activity as directed by your provider.
- Keep your sutures clean.
- Wash your hands before and after changing the dressing on your incision, and after disposing of the dressing.
- Continue taking prescribed medication until it is finished.
- Contact your provider if the following signs of wound infection appear:
 - redness or warmth at the suture site
 - yellow or green drainage from the wound
 - fever.

Can I help prevent appendicitis?

There is no way to prevent appendicitis. However, appendicitis is less common in people who eat foods containing fiber and roughage such as raw vegetables and fruits.

If you think you might have appendicitis, call your health care provider right away so that if your appendix is infected, it can be removed before it ruptures