Intermountain® Healthcare

Laparoscopic Appendectomy (appendix removal)

What is it?

Laparoscopic appendectomy is a surgery to remove your appendix. Your doctor will make 3 or 4 very small (¼- to ½-inch wide) incisions (cuts) through the skin of your abdomen. The abdomen is inflated with a harmless gas so the doctor can see the organs inside. A long tube with a tiny camera at the end (a **laparoscope**) is inserted through one of the openings. The laparoscope sends enlarged images to a screen, helping your doctor see your appendix and remove it using other small surgical tools.

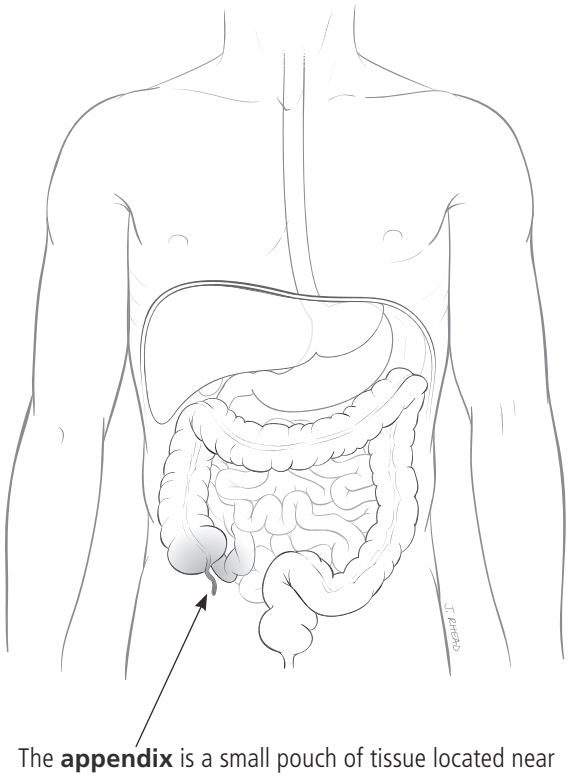
Why do I need it?

Appendectomy is the treatment for **appendicitis**, a condition in which your appendix becomes infected and inflamed. An appendectomy is almost always an emergency surgery. If an infected appendix is not removed right away, it may burst and cause further problems, even death. Since the appendix has no known function, living without it causes no known health problems.

What are the symptoms of appendicitis?

Symptoms of appendicitis can include:

- Abdominal pain, first near the navel, then moving to the lower right
- Loss of appetite
- Nausea or vomiting
- Abdominal swelling
- Constipation or diarrhea
- Fever



The **appendix** is a small pouch of tissue located near where the small intestine meets the large intestine (colon). If the appendix becomes inflamed, it must be removed. Since the appendix has no known function, living without it causes no known health problems.

How does my doctor diagnose appendicitis?

Your doctor will examine you and ask questions about your symptoms and medical history. You may also have blood tests and imaging tests (such as x-rays). However, there is no test that tells your doctor for sure that appendicitis is causing your symptoms. Your doctor will use his or her best clinical judgment.

Note: In some circumstances — such as if your appendix has already burst — your doctor may opt for a traditional appendectomy that requires a larger incision to remove the appendix.

Talking with your doctor about this procedure

Your doctor will talk with you about your procedure, including the most common benefits, risks, and alternatives (see the table below). Other benefits and risks may apply in your unique medical situation. The conversation you have with your healthcare provider is the most important part of learning about your surgery and what to expect.

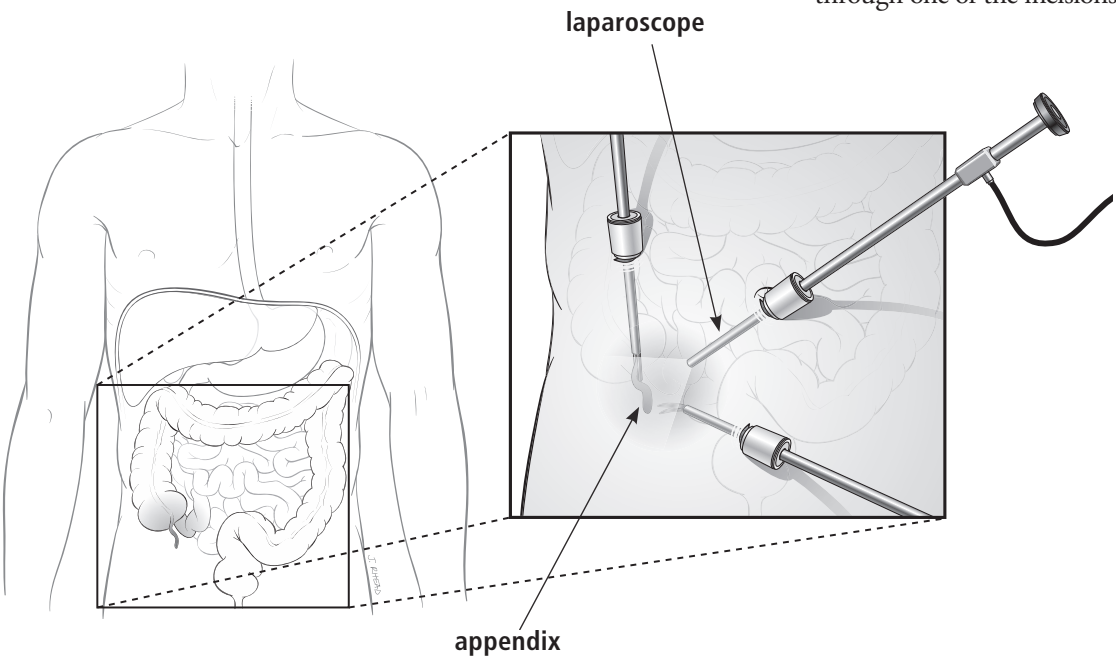
Potential benefits	Potential risks and complications	Alternatives
Laparoscopic appendectomy has several advantages over traditional surgery: • Less pain after surgery • Faster return of bowel function and normal activities • Smaller scars • Possible shorter hospital stay	With any surgery, complications are possible. Laparoscopic appendectomy is relatively low risk compared to other abdominal surgeries. • The greatest risk is infection in and around the incisions or inside the abdomen. • Other, rarer risks include Injury to nearby organs, blood clots, urinary infection and retention, and heart or breathing problems. These risks may be associated with other health conditions you already have. Your doctor will consider these risks and discuss them with you.	Once appendicitis starts, there is no known medical therapy. The appendix must be surgically removed. The alternative to laparoscopic appendectomy is traditional appendectomy (with one larger incision). In certain circumstances your doctor may choose or switch to traditional surgery.

What happens before the procedure?

- You may be given a sedative to make you sleepy.
- An intravenous (IV) line will be attached to your hand or forearm so you can be given general anesthesia.
- A breathing tube will be placed in your throat to keep your airway open during surgery.

What happens during the procedure?

- Your doctor will make 3 or 4 very small (¼- to ½-inch wide) incisions (cuts) through the skin of your abdomen.
- The abdomen will be inflated with a harmless gas, creating more space for your doctor to see your appendix and other organs.
- Your doctor will insert a narrow tube, called a cannula, through one of the incisions.



- A laparoscope (a long tube with a tiny video camera at the end) will be inserted through the cannula. The camera projects an enlarged image of the inside of your abdomen, including your appendix, to a screen.
- Cannulas will be inserted through the other incisions to position tools so the appendix can be removed.

What happens after the procedure?

- **Closing your incisions:** After the appendix is removed, the incisions are closed with small sutures (stitches), small strips of tape (Steri-Strips), or both. A dressing may be placed over the incisions.
- **Monitoring your recovery.** After the procedure, you will be taken to a recovery room where your vital signs (temperature, pulse, breathing rate, and blood pressure) will be monitored for about an hour or more.
- **Going home:** You can usually go home the same day. You should arrange for someone to drive you home. Before you leave, your nurse will provide instructions. Make sure someone is there to take notes, because after surgery you may not remember everything.

How do I care for myself at home?

Incision care

- Your doctor will let you know when you can remove your dressings and when it's okay to take a bath or shower without worrying about getting your incisions wet. In most cases, you can bathe or shower within 1 to 2 days.
- If you have steri-strips, you can usually leave them in place until they fall off (usually within 7 to 10 days). Your doctor may remove them, along with any stitches, at your follow-up visit. If the edges of the steri-strips start to peel, you may trim them back. Let your doctor know if the steri-strips irritate your skin. In this case, you may need to remove them earlier.
- You may have a small amount of bleeding from your surgical incisions. This is normal. Women may have some vaginal bleeding. If so, use pads, not tampons.
- Watch for signs of infection at the incision site (increased redness or swelling, pus, or fever over 101° F) and report them to your doctor.

Pain management

- You may have the following types of pain or discomfort after surgery:
  - Incision pain, which will improve over the first few days, but may take a few weeks to go away completely.
  - Shoulder or neck pain for the first 2 or 3 days. This is from nerve irritation caused by the gas injected into your abdomen during the procedure. The pain may get better if you change positions.
  - Cramping or swelling in your abdomen for the first several days.
  - A sore throat for 1 to 2 days after the surgery. This is caused by irritation from the breathing tube placed during the procedure.
- You will be given oral pain medication. Be sure to follow your doctor's instructions for taking this medication. Pain medication may cause constipation. If necessary, you may take over-the-counter stool softeners or laxatives.

Rest, activity, and work

- Rest on the day of the surgery.
- After that, get up and walk 4 to 5 times a day. This will improve the circulation in your legs and reduce the risk of blood clots or muscle soreness. Gradually increase the time and distance that you walk each day.
- Deep breathing for the first few days after surgery is also helpful.
- Avoid heavy lifting or exercise for the first 7 days or as otherwise instructed by your doctor.
- Return to normal activity when your doctor allows, usually within a week or two.
- Ask your doctor about when you can return to work.

Follow-up appointment

Your doctor will usually want to see you about a week after the procedure. Be sure to keep your follow-up appointment. Use the space on the back of this document to write down any questions you may have.

When should I contact my doctor?

Contact your doctor if you experience any of the following:

- Severe abdominal pain, or pain you can't control
- Severe bloating or swollen stomach
- Chills
- Fever above 101° F
- Nausea or vomiting that doesn't stop
- Bleeding from the rectum
- Increasing redness or pus draining from any of your incisions
- Inability to urinate 8 to 10 hours after surgery
- No bowel movement within 3 days of surgery
- Feeling faint or light-headed even when lying down
- Other: _____

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Other instructions

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Questions

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