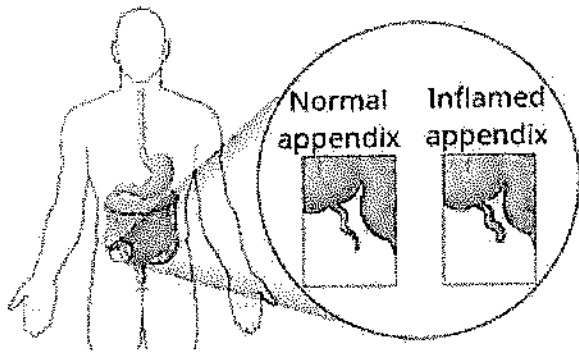


Laparoscopic Appendectomy, Adult



A laparoscopic appendectomy is a surgery to take out the appendix. The appendix is a finger-like structure that is attached to the large intestine. In this surgery, the appendix is removed through three small incisions with the help of a thin, lighted tube that has a camera (*laparoscope*).

This procedure may be done to prevent an inflamed appendix from bursting (*rupturing*). It may also be done to treat the infection from an appendix that has already ruptured. It is usually done right after inflammation of the appendix (*appendicitis*) is diagnosed. This is a minimally invasive surgery. It usually results in less pain, fewer problems, and a quicker recovery than surgery done through a large incision.

Tell a health care provider about:

- Any allergies you have.
- All medicines you are taking, including vitamins, herbs, eye drops, creams, and over-the-counter medicines.
- Use of steroids (by mouth or creams).
- Any problems you or family members have had with anesthetic medicines.
- Any blood disorders you have.
- Any surgeries you have had.
- Any medical conditions you have.
- Whether you are pregnant or may be pregnant.

What are the risks?

Generally, this is a safe procedure. However, problems may occur, including:

- Infection.
- Bleeding.
- Allergic reactions to medicines.
- Damage to other structures or organs.
- The formation of pus (*abscesses*).
- Long-lasting pain or scarring at the incision sites or inside the abdomen.
- Blood clots in the legs.

What happens before the procedure?

Eating and drinking restrictions

Follow instructions from your health care provider about eating and drinking restrictions. You may be asked not to eat or drink as soon as the diagnosis of appendicitis is made.

Medicines

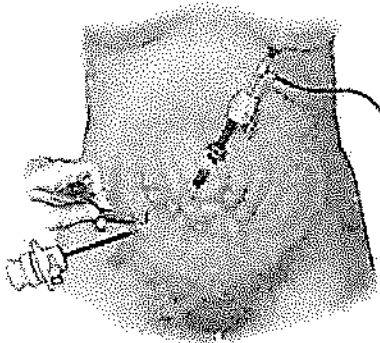
Ask your health care provider about:

- Changing or stopping your regular medicines. This is especially important if you are taking diabetes medicines or blood thinners.
- Taking medicines such as aspirin and ibuprofen. These medicines can thin your blood. **Do not** take these medicines unless your health care provider tells you to take them.
- Taking over-the-counter medicines, vitamins, herbs, and supplements.

General instructions

- Plan to have someone take you home from the hospital.
- If you will be going home right after the procedure, plan to have someone with you for 24 hours.
- You may be given antibiotic medicine to help prevent infection or to treat existing inflammation or infection.
- Ask your health care provider how your surgical site will be marked or identified.
- Ask your health care provider what steps will be taken to help prevent infection. These may include:
 - Removing hair at the surgery site.
 - Washing skin with a germ-killing soap.
 - Taking antibiotic medicine.

What happens during the procedure?



- An IV will be inserted into one of your veins.
- You will be given one or more of the following:
 - A medicine to help you relax (*sedative*).
 - A medicine to numb the area (*local anesthetic*).
 - A medicine to make you fall asleep (*general anesthetic*).
- A thin, flexible tube (*catheter*) may be put into your bladder to drain urine.
- A tube may be passed through your nose and into your stomach (*NG tube*, or *nasogastric tube*) to drain any stomach contents.
- Your surgeon will make three small incisions near your belly button (*navel*).
- Air-like gas will be used to fill your abdomen. The gas will make your abdomen expand. This helps the surgeon see clearly and gives him or her more room to work.
- A laparoscope will be passed through one of the incisions.
- Other long, thin surgical instruments will be passed through the other incisions.
- The appendix will be located and removed through one of the incisions.
- The abdomen may be washed out to remove bacteria.
- The incisions will be closed with stitches (*sutures*), staples, or adhesive strips.
- A bandage (*dressing*) may be used to cover the incisions.

- If a tube was inserted into your bladder or stomach, it will be removed.

The procedure may vary among health care providers and hospitals.

What happens after the procedure?

- Your blood pressure, heart rate, breathing rate, and blood oxygen level will be monitored until you leave the hospital.
- You will be given medicines as needed to control pain.
- **Do not** drive for 24 hours if you were given a sedative during your procedure.
- If your appendix did not rupture, you may be able to go home the same day after your surgery.
- If your appendix ruptured:
 - You will get antibiotic medicine through an IV line.
 - You may be sent home with a temporary drain.

Summary

- A laparoscopic appendectomy is a surgery to take out the appendix. The appendix is removed through three small incisions with the help of a thin, lighted tube that has a camera.
- This is a safe procedure, but there are some risks, including bleeding, infection, allergic reaction to medicines, or damage to other organs.
- You may be asked not to eat or drink as soon as a diagnosis of appendicitis is made.
- After the procedure, your blood pressure, heart rate, breathing rate, and blood oxygen level will be monitored until you leave the hospital.

This information is not intended to replace advice given to you by your health care provider. Make sure you discuss any questions you have with your healthcare provider.

Surgical Procedures for Hemorrhoids

Surgical procedures can be used to treat hemorrhoids. Hemorrhoids are swollen veins that are inside the rectum (*internal hemorrhoids*) or around the anus (*external hemorrhoids*). They are caused by increased pressure in the anal area. This pressure may result from straining to have a bowel movement (*constipation*), diarrhea, pregnancy, obesity, or sitting for long periods of time.

Hemorrhoids can cause symptoms such as pain and bleeding. Surgery may be needed if diet changes, lifestyle changes, and other treatments do not help your symptoms. Common surgical methods that may be used include:

- Closed hemorrhoidectomy. The hemorrhoids are surgically removed, and the incisions are closed with stitches (*sutures*).
- Open hemorrhoidectomy. The hemorrhoids are surgically removed, but the incisions are allowed to heal without sutures.
- Stapled hemorrhoidectomy. The hemorrhoids are partially removed, and the incisions are closed with staples.

Tell a health care provider about:

- Any allergies you have.
- All medicines you are taking, including vitamins, herbs, eye drops, creams, and over-the-counter medicines.
- Any problems you or family members have had with anesthetic medicines.
- Any blood disorders you have.
- Any surgeries you have had.
- Any medical conditions you have.
- Whether you are pregnant or may be pregnant.

What are the risks?

Generally, this is a safe procedure. However, problems may occur, including:

- Infection.
- Bleeding.
- Allergic reactions to medicines.
- Damage to other structures or organs.
- Pain.
- Constipation.
- Difficulty passing urine.
- Narrowing of the anal canal (*stenosis*).
- Difficulty controlling bowel movements (*incontinence*).
- Recurring hemorrhoids.
- A new passage (*fistula*) that forms between the anus or rectum and another area.

What happens before the procedure?

Medicines

- Ask your health care provider about:
 - Changing or stopping your regular medicines. This is especially important if you are taking diabetes medicines or blood thinners.

- Taking medicines such as aspirin and ibuprofen. These medicines can thin your blood. **Do not** take these medicines unless your health care provider tells you to take them.
- Taking over-the-counter medicines, vitamins, herbs, and supplements.

Staying hydrated



Follow instructions from your health care provider about hydration, which may include:

- Up to 2 hours before the procedure – you may continue to drink clear liquids, such as water, clear fruit juice, black coffee, and plain tea.

Eating and drinking

Follow instructions from your health care provider about eating and drinking, which may include:

- 8 hours before the procedure – stop eating heavy meals or foods, such as meat, fried foods, or fatty foods.
- 6 hours before the procedure – stop eating light meals or foods, such as toast or cereal.
- 6 hours before the procedure – stop drinking milk or drinks that contain milk.
- 2 hours before the procedure – stop drinking clear liquids.

General instructions

- You may need to have a procedure to examine the inside of your colon with a scope (*colonoscopy*). Your health care provider may do this to make sure that there are no other causes for your bleeding or pain.
- You may be instructed to take a laxative and an enema to clean out your colon before surgery (*bowel prep*). Carefully follow instructions from your health care provider about bowel prep.
- Plan to have someone take you home from the hospital or clinic.
- Plan to have a responsible adult care for you for at least 24 hours after you leave the hospital or clinic. This is important.
- Ask your health care provider:
 - How your surgery site will be marked.
 - What steps will be taken to help prevent infection. These may include:
 - Washing skin with a germ-killing soap.
 - Taking antibiotic medicine.

What happens during the procedure?

- An IV will be inserted into one of your veins.
- You will be given one or more of the following:
 - A medicine to help you relax (*sedative*).
 - A medicine to numb the area (*local anesthetic*).
 - A medicine to make you fall asleep (*general anesthetic*).
 - A medicine that is injected into an area of your body to numb everything below the injection site (*regional anesthetic*).

- A lubricating jelly may be placed into your rectum.
- Your surgeon will insert a short scope (*anoscope*) into your rectum to examine the hemorrhoids.
- One of the following surgical methods will be used to remove the hemorrhoids:
 - Closed hemorrhoidectomy.
 - Your surgeon will use surgical instruments to open the tissue around the hemorrhoids.
 - The veins that supply the hemorrhoids will be tied off with a suture.
 - The hemorrhoids will be removed.
 - The tissue that surrounds the hemorrhoids will be closed with sutures that your body can absorb (*absorbable sutures*).
 - Open hemorrhoidectomy.
 - The hemorrhoids will be removed with surgical instruments.
 - The incisions will be left open to heal without sutures.
 - Stapled hemorrhoidectomy.
 - Your surgeon will use a circular stapling device to partially remove the hemorrhoids.
 - The device will be inserted into your anus. It will remove a circular ring of tissue that includes hemorrhoid tissue and some tissue above the hemorrhoids.
 - The staples in the device will close the edges of the tissue. This will cut off the blood supply to any remaining hemorrhoids and pull the tissue back into place.

Each of these procedures may vary among health care providers and hospitals.

What happens after the procedure?

- Your blood pressure, heart rate, breathing rate, and blood oxygen level may be monitored until you leave the hospital or clinic.
- You will be given pain medicine as needed.
- **Do not** drive for 24 hours if you were given a sedative during your procedure.

Summary

- Surgery may be needed for hemorrhoids if diet changes, lifestyle changes, and other treatments do not help your symptoms.
- There are three common methods of surgery that are used to treat hemorrhoids.
- Follow instructions from your health care provider about taking medicines and about eating and drinking before the procedure.
- You may be instructed to take a laxative and an enema to clean out your colon before surgery (*bowel prep*).

This information is not intended to replace advice given to you by your health care provider. Make sure you discuss any questions you have with your healthcare provider.