

Minimally Invasive Cholecystectomy

Minimally invasive cholecystectomy is surgery to remove the gallbladder. The gallbladder is a pear-shaped organ that lies beneath the liver on the right side of the body. The gallbladder stores bile, which is a fluid that helps the body digest fats. Cholecystectomy is often done to treat inflammation of the gallbladder (*cholecystitis*). This condition is usually caused by a buildup of gallstones (*cholelithiasis*) in the gallbladder. Gallstones can block the flow of bile, which can result in inflammation and pain. In severe cases, emergency surgery may be required.

This procedure is done through small incisions in the abdomen, instead of one large incision. It is also called laparoscopic surgery. A thin scope with a camera (*laparoscope*) is inserted through one incision. Then surgical instruments are inserted through the other incisions. In some cases, a minimally invasive surgery may need to be changed to a surgery that is done through a larger incision. This is called open surgery.

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 nearby structures or organs.
- A stone remaining in the common bile duct. The common bile duct carries bile from the gallbladder into the small intestine.
- A bile leak from the cyst duct that is clipped when your gallbladder is removed.

What happens before the procedure?

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 restrictions

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.

Medicines

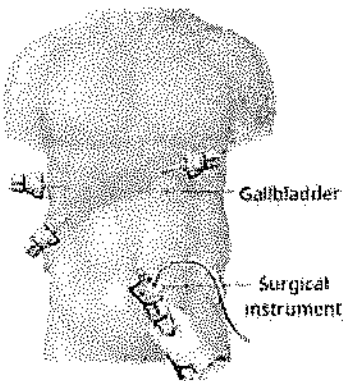
Ask your health care provider about:

- 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

- Let your health care provider know if you develop a cold or an infection before surgery.
- Plan to have someone take you home from the hospital or clinic.
- If you will be going home right after the procedure, plan to have someone with you for 24 hours.
- Ask your health care provider:
 - How your surgery site will be marked.
 - 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 both of the following:
 - A medicine to help you relax (*sedative*).
 - A medicine to make you fall asleep (*general anesthetic*).
- A breathing tube will be placed in your mouth.
- Your surgeon will make several small incisions in your abdomen.
- The laparoscope will be inserted through one of the small incisions. The camera on the laparoscope will send

images to a monitor in the operating room. This lets your surgeon see inside your abdomen.

- A gas will be pumped into your abdomen. This will expand your abdomen to give the surgeon more room to perform the surgery.
- Other tools that are needed for the procedure will be inserted through the other incisions. The gallbladder will be removed through one of the incisions.
- Your common bile duct may be examined. If stones are found in the common bile duct, they may be removed.
- After your gallbladder has been removed, the incisions will be closed with stitches (*sutures*), staples, or skin glue.
- Your incisions may be covered with a bandage (*dressing*).

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 or clinic.
- You will be given medicines as needed to control your pain.
- If you were given a sedative during the procedure, it can affect you for several hours. **Do not** drive or operate machinery until your health care provider says that it is safe.

Summary

- Minimally invasive cholecystectomy, also called laparoscopic cholecystectomy, is surgery to remove the gallbladder using small incisions.
- Tell your health care provider about all the medical conditions you have and all the medicines you are taking for those conditions.
- Before the procedure, follow instructions about eating or drinking restrictions and changing or stopping medicines.
- If you were given a sedative during the procedure, it can affect you for several hours. **Do not** drive or operate machinery until your health care provider says that it is safe.

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.