

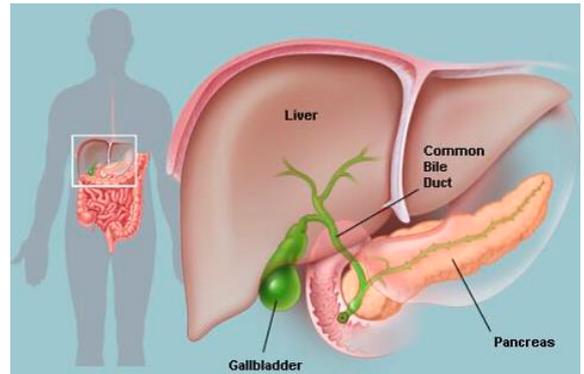
Gallbladder Removal Surgery (Laparoscopic Cholecystectomy) Patient Information

What is the gallbladder?

Your gallbladder is a small organ which sits under the liver in the right upper abdomen.

The liver is an important organ which has many functions. One of these is to produce a green liquid called bile. Bile flows through the bile ducts into the intestine where it helps your body break down oily food.

The gallbladder is located at the end of a branch of the main bile duct and acts a storage reservoir. It collects, stores and concentrates bile between meals. After a meal, a normal gallbladder squeezes extra bile into the digestive tract to help with digestion.



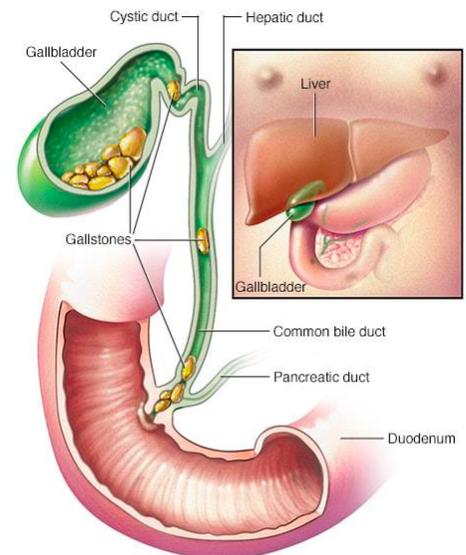
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What Causes Gallbladder Problems?

Gallstones are often the cause of “gallbladder pain” by blocking the opening of the gallbladder. They can also get into the bile duct, and cause more serious issues like pancreatitis or a bile duct infection.

Gallstones can occur in anyone at any age and to anyone. These are some known risk factors:

- female
- women who have had children
- overweight
- greater than 40
- rapid weight loss or fast fasting
- family history
- hematologic (blood) disorders



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Gallbladder polyps (small growths) can also occur within the gallbladder. These are usually benign (not cancer) and do not cause symptoms. The gallbladder is usually removed if polyps are over 1 cm in diameter.

What are the symptoms of gallbladder stones?

Symptoms can include the following and are often non-specific. Discuss with your surgeon whether your symptoms are likely due to gallstones and whether your gallbladder needs to be removed:

- Pain after eating or at night, usually in the upper middle or right abdomen, sometimes radiating to their upper back
- Indigestion and bloating
- Fever
- Jaundice (yellow eyes and skin)

Some people have no symptoms. Sometimes gallbladder stones are found during an ultrasound or other imaging without any known symptoms. If this is the case, gallstones can usually be left alone.

How do doctors investigate gallbladder problems?

Your doctor will likely order a test called an ultrasound. It shows the inside of the body using sound waves. You are awake during the test, and it does not hurt. Occasionally, additional tests may be required. These include blood tests, CT scan, MRI or ERCP.

How are gallbladder problems treated?

The most effective treatment is surgical removal of the gallbladder, called laparoscopic cholecystectomy. This is a minimally invasive (“keyhole”) operation and is now the standard approach. The operation is performed under general anesthesia (you will be asleep). Small incisions are made in the abdomen, and a camera and instruments are used to remove the gallbladder. Most patients have 4-5 small incisions, which are closed with dissolvable stitches.

Diet changes (such as reducing fatty foods) may help symptoms and many patients continue with this without further symptoms and do not need surgery. Medications to dissolve gallstones are generally ineffective.



Benefits of Surgery

Removing the gallbladder, in most cases, will relieve and prevent future episodes of pain that you are getting from gallstones, and prevent potential complications of gallstones (infection, jaundice, pancreatitis).

If you have having surgery for a gallbladder polyp, this procedure will remove the gallbladder and the polyp. This prevents the polyp from growing and developing into any more worrisome problems.

What are the Possible Complications of Laparoscopic Gallbladder Removal?

Any operation has potential risks. Laparoscopic cholecystectomy is very safe, but complications can rarely occur:

- Bleeding – 1%
- Infection – 1%
- Injury to nearby organs (bile duct or intestines) – 0.5%
- Bile leakage – 1%, a temporary drainage tube may be required
- Retained bile duct stones (may require ERCP) – up to 5%
- Hernia at an incision site
- Heart, lung, or blood clot complications (rare, higher risk in older patients or those with medical conditions)
- All incisions heal with scars, which usually fade over time. Some individuals may develop more noticeable or keloid scars.

Long-term side effects:

- About 10% of patients experience loose or more frequent bowel movements after surgery. This usually improves within 1–2 months. 1% of patients require long-term management.