PROCEDURE

Open gallbladder removal

Open gallbladder removal is surgery to remove the gallbladder through an incision in the abdomen.

PURPOSE
Remove a diseased or troublesome gallbladder

PROCEDURE TYPE
Therapeutic surgery through a larger abdominal incision

WHERE IT IS DONE
Operating theatre

ANAESTHESIA
General

HOW LONG IT TAKES
About 1 to 2 hours

PREPARATION
Fasting and medication review; blood thinner plan if prescribed

RECOVERY
Several hospital days; no driving until safely able

MAIN RISKS
Bleeding, infection, bile leak, bile duct or organ injury

RESULTS
Surgical findings immediately; laboratory analysis usually within several days

Overview

Open gallbladder removal, also called open cholecystectomy, is surgery to remove your gallbladder through one larger abdominal incision. The gallbladder is a small organ under the liver that stores bile, a fluid used to digest fat.

Most gallbladder removals are performed using keyhole, or laparoscopic, surgery. An open operation may be planned from the start, or a keyhole operation may need to be changed to open surgery. This can happen if inflammation, scar tissue, bleeding, or unclear anatomy makes it unsafe to continue through small incisions.

The operation is performed under general anaesthesia, so you are unconscious and do not feel the surgery. Removing the gallbladder does not stop your liver from making bile. After surgery, bile flows directly from the liver into the intestine.

Why the procedure is performed

Open gallbladder removal may be used to treat gallstones that repeatedly cause pain or complications. Gallstones are hardened deposits that can block the flow of bile.

Reasons for removing the gallbladder include:

An open approach may be recommended if previous abdominal surgery has caused extensive scar tissue, the gallbladder is severely inflamed, or cancer is suspected. It may also be safer when the surgeon cannot clearly identify the bile ducts and blood vessels during keyhole surgery.

Changing from keyhole to open surgery is a safety decision, not necessarily a sign that something has gone wrong.

- Repeated gallstone attacks
- Acute or long-lasting gallbladder inflammation
- Gallbladder infection or tissue damage
- Gallstones that have contributed to pancreatitis
- Concern about gallbladder cancer
- A gallbladder that is severely scarred or difficult to reach safely

Who should and should not have it

You may be offered this operation when removing the gallbladder is expected to prevent further pain, infection, blockage, or other complications, and an open approach is considered safer than keyhole surgery.

Gallstones that have never caused symptoms often do not require gallbladder removal. The balance may also be less clear if your symptoms are unlikely to come from the gallbladder.

Surgery may be delayed if you have an uncontrolled infection elsewhere, a serious medical condition that needs stabilising, or a blood-clotting problem that can be corrected. Blood-thinning medicines require an individual plan because stopping them can also carry risks.

Some people are too unwell for general anaesthesia or major abdominal surgery. In that situation, temporary gallbladder drainage or treatment with medicines may be considered. Emergency surgery may still be necessary when the risks of waiting are greater than the risks of operating.

How to prepare

Your treating facility's own instructions take priority because fasting times and medication plans can differ.

You will usually be told when to stop eating and drinking before the operation. Following these instructions reduces the risk of stomach contents entering your lungs during anaesthesia.

Give the surgical team a current list of your medicines, vitamins, supplements, allergies, and previous reactions to anaesthesia. Ask specifically what to do with blood thinners like warfarin or apixaban , diabetes medicines, and medicines taken on the morning of surgery. Do not stop a prescribed blood thinner without an agreed plan.

You may have blood tests and, when needed, heart or lung tests. Imaging such as an ultrasound, CT scan, or MRI may already have been used to examine the gallbladder and bile ducts.

Arrange help for after discharge. Pack loose clothing that will not press on the incision. If you smoke, stopping before surgery can improve wound and lung healing, even when the available time is short.

What happens during the procedure

After you arrive, the team confirms your identity, the planned operation, allergies, and consent. An intravenous line is placed, and the anaesthetist gives general anaesthesia. A breathing tube supports your breathing while you are asleep.

The surgeon makes an incision in the upper abdomen, usually beneath the right ribs or sometimes through the middle of the abdomen. The gallbladder is separated from the liver, and its duct and blood vessel are sealed before it is removed.

The surgeon may take an X-ray of the bile ducts during the operation by injecting contrast dye. This is called an operative cholangiogram. It can help identify bile duct stones or clarify the anatomy.

If gallbladder cancer is suspected, the operation may involve nearby liver tissue or lymph nodes. Your surgeon should explain this possibility before surgery whenever it can be anticipated.

The incision is closed with stitches, staples, or both. A temporary drain may be left near the operation site to remove fluid. The gallbladder is usually sent to a laboratory for examination under a microscope.

Recovery and what to expect afterward

Pain is expected around the incision. You will be offered pain relief, and the discomfort should gradually improve. Supporting the wound with a pillow when coughing or moving may help. Tell the hospital team if pain is severe or increasing despite treatment.

You may begin with sips of fluid and then move toward solid food as nausea settles and your bowel starts working. Smaller, lower-fat meals may be easier at first. Most people can gradually return to their usual diet, although temporary bloating or loose stools can occur.

Walking soon after surgery helps circulation and lowers the risk of blood clots and chest problems. You may also be shown deep-breathing exercises. Avoid heavy lifting and strenuous abdominal activity until the surgical team says the incision has healed well.

Do not drive while taking opioid pain medicine, while your movement is limited, or until you can wear a seat belt and perform an emergency stop without significant pain. Follow your surgeon's specific driving advice.

A hospital stay of several days is common. Returning to work often takes several weeks and may take longer for jobs involving lifting or physical effort. Your recovery may also be longer if the operation was an emergency or involved severe infection.

Risks and possible complications

Your surgical and anaesthesia teams should explain your individual risks before consent. Possible complications include:

Bile duct injury may require another procedure or operation. Some people also develop ongoing digestive symptoms after surgery, although these symptoms are not always caused by gallbladder removal.

- Bleeding or the need for a blood transfusion
- Infection in the wound or inside the abdomen
- Leakage of bile
- Injury to the main bile duct, liver, bowel, or nearby blood vessels
- Stones remaining in the main bile duct
- Blood clots in the legs or lungs
- Chest infection or breathing problems

- A bulge or hernia developing at the incision
- Reactions or heart and lung problems related to anaesthesia

Results and follow up

The surgeon can usually tell you what was found soon after the operation. If you are still affected by anaesthesia, the details may also be given to the support person you named.

Laboratory examination of the gallbladder usually takes several days. It can confirm inflammation, stones, or other changes. If an unexpected abnormality is found, the team will explain whether more tests or treatment are needed.

Routine follow-up checks the incision, pain control, eating, bowel function, and return to normal activities. This appointment may also be used to remove staples or a drain. Ask when and how you will receive the laboratory report rather than assuming that no news means a normal result.

Alternatives

Keyhole gallbladder removal is the main alternative when it can be done safely. It uses several small incisions and usually offers less wound pain and a faster recovery. It may not provide safe access when inflammation, scar tissue, bleeding, or suspected cancer is present.

Other options include:

If open surgery is proposed after a planned keyhole start, the practical alternative may be to stop the operation. That can leave the original problem untreated and may require another procedure later.

- Observation: Avoids surgery now, but gallstone pain or complications may return
- Medicines and dietary changes: May reduce symptoms but do not reliably remove gallstones
- Endoscopic bile duct treatment: ERCP can remove stones from the main bile duct but does not remove the gallbladder
- Gallbladder drainage: A tube can control infection in someone too unwell for surgery, but it may be temporary
- Stone-dissolving medicine: Suitable for limited situations, works slowly, and stones may return

When to call your healthcare team

Contact your surgical team promptly if you have worsening abdominal pain, repeated vomiting, fever, increasing redness, pus, wound separation, or fluid leaking from the incision. Also seek prompt advice for yellow skin or eyes, dark urine, a swollen abdomen, inability to keep fluids down, or new swelling and pain in one calf.

Mild bruising, tiredness, and gradually improving incision pain can be part of routine recovery. Mention symptoms that persist or interfere with eating and activity at your follow-up appointment.

Call emergency services for severe trouble breathing, chest pain, fainting, confusion, coughing up blood, or sudden severe weakness. Do not drive yourself for emergency care.

Common questions

Will I be asleep?

Yes. Open gallbladder removal is performed under general anaesthesia. You will be unconscious, and a breathing tube will support your breathing during surgery.

Can I drive home?

No. You will remain in hospital after the operation. When you leave, someone else should drive you. Do not resume driving until you can control the vehicle safely and are no longer taking medicine that impairs alertness.

How painful is it?

The larger incision usually causes more pain than keyhole surgery. Pain medicine, careful movement, and supporting the incision when coughing can help. Pain should improve rather than become steadily worse.

When will I know what the surgeon found?

The surgeon can usually explain the operative findings soon afterward. Microscopic examination of the removed gallbladder generally takes several days.

Can I live normally without a gallbladder?

Yes. Your liver continues to produce bile. Some people notice temporary loose stools, bloating, or difficulty with fatty meals, but many return to their usual diet.

How long does full recovery take?

Recovery commonly takes several weeks. The timing is influenced by your health, the reason

for surgery, any complications, and whether your work involves physical activity.

Sources

- National Institute of Diabetes and Digestive and Kidney Diseases - Treatment for Gallstones
- MedlinePlus Medical Encyclopedia - Gallbladder removal: open discharge
- NHS - Gallbladder removal
- National Institute for Health and Care Excellence - Gallstone disease: diagnosis and management, Clinical Guideline CG188
- Society of American Gastrointestinal and Endoscopic Surgeons - Guidelines for the Clinical Application of Laparoscopic Biliary Tract Surgery
- American College of Surgeons - Cholecystectomy: Surgical removal of the gallbladder