Overview

Gallbladder removal surgery, also known as a cholecystectomy, is a very common procedure.

The gallbladder is a small, pouch-like organ in the upper right part of your tummy. It stores bile, a fluid produced by the liver that helps break down fatty foods.
Both techniques are performed under general anaesthetic, which means you'll be asleep during the operation and won't feel any pain while it's carried out.

Read more about how gallbladder removal surgery is performed.

Recovering from gallbladder removal surgery

It doesn't usually take long to recover from keyhole surgery to remove your gallbladder.

Most people can leave hospital the same day or the next morning. You'll probably be able to return to most of your normal activities within two weeks.

It takes longer to recover from open surgery. You may need to stay in hospital for three to five days and it could be six to eight weeks before you're feeling back to normal.

Read more about recovering from gallbladder removal surgery.

Living without a gallbladder

You can lead a perfectly normal life without a gallbladder.

Your liver will still make enough bile to digest your food but, instead of being stored in the gallbladder, it drips continuously into your digestive system.

You may have been advised to eat a special diet before surgery, but this doesn't need to be continued afterwards. Instead, you should aim to have a generally healthy, balanced diet.

Some people experience problems such as bloating or diarrhoea after surgery, although this usually improves within a few weeks. If you notice certain foods or drinks trigger these symptoms, you may wish to avoid them in the future.

Read more about your diet after gallbladder surgery.

Risks of gallbladder removal surgery
Gallbladder removal surgery is considered to be a safe procedure, but like any type of surgery there is a risk of complications.

Possible complications include:

- wound infection
- bile leaking into the tummy
- damage to one of the openings (ducts) carrying bile out of the liver
- **blood clots**

Speak to your surgeon about the benefits and risks of surgery before your operation.

Read more about the [complications of gallbladder removal surgery](https://www.nhs.uk/conditions/gallbladder-removal/).
Gallbladder removal

1. Overview
2. What happens
3. Recovery
4. Complications

Hide sections ▼

• Types of gallbladder removal surgery

What happens

You'll need to have a pre-operative assessment in hospital during the weeks leading up to your gallbladder removal surgery (cholecystectomy).

During this appointment:

• you may have some blood tests and a general health check to make sure that you're fit for surgery and determine whether a keyhole or open procedure (see below) is most suitable for you
• you can discuss any concerns or ask any questions about your operation
• you'll be advised about things you can do to reduce your risk of problems after surgery, such as stopping smoking

https://www.nhs.uk/conditions/gallbladder-removal/what-happens/
• you'll be told about when you need to stop eating and drinking before your operation – this will usually be from the night before

Read more about having an operation and general advice about going into hospital.

Types of gallbladder removal surgery

There are two main ways gallbladder removal surgery can be performed:

• laparoscopic (keyhole) surgery – several small cuts (incisions) are made in your tummy (abdomen) to access and remove your gallbladder
• open surgery – a single, larger incision is made in your tummy to access and remove your gallbladder

Both procedures are performed under general anaesthetic (where you’re asleep) and both are equally effective.

However, keyhole surgery tends to be carried out whenever possible because you can leave hospital sooner, recover faster and are left with smaller scars.

Keyhole surgery

During keyhole gallbladder removal surgery:

• a small incision (about 2-3cm) is made by your belly button and two or three smaller incisions (about 1cm or less) or made on the right side of your tummy
• a small tube is inserted into one of the incisions and carbon dioxide gas is pumped into your tummy, inflating the abdomen to make it easier for your surgeon to access your gallbladder
• a laparoscope (a long, thin telescope with a light and camera at the end) is inserted through the larger incision, which allows your surgeon to see inside your tummy on a monitor
• special surgical instruments are inserted through the other incisions and are used to remove your gallbladder
• the gas is released from your tummy, and the incisions are closed with stitches and covered with dressings

You can usually go home later the same day. Recovery typically takes about two weeks.

Read more about recovering from gallbladder removal surgery.

Open surgery

An open procedure may be recommended if you can't have keyhole surgery – for example, because you have a lot of scar tissue from previous surgery on your tummy.

It's also sometimes necessary to turn a keyhole procedure into an open one during the operation if your surgeon is unable to see your gallbladder clearly or remove it safely.

Your surgeon can explain why they feel an open procedure is best for you and if you're due to have keyhole surgery, the risk of it becoming an open procedure should be discussed beforehand.

During open gallbladder removal surgery:

• a larger incision (about 10-20cm) is made in your tummy, underneath your ribs
• surgical instruments are used to remove your gallbladder
• the incision is closed with stitches and is covered with a dressing

You'll usually need to stay in hospital for a few days afterwards. Recovery typically takes six to eight weeks.

Page last reviewed: 27/01/2016
Next review due: 01/01/2019
Gallbladder removal

1. Overview
2. What happens
3. Recovery
4. Complications

Hide sections ▼

- Possible side effects of surgery
- Looking after your wounds
- Getting back to normal
- When to get medical advice

Recovery

How long it takes to recover from gallbladder removal surgery (cholecystectomy) depends on whether you had a laparoscopic (keyhole) or open procedure.

Most people who have keyhole surgery are able to leave hospital on the same day as the operation. It will usually take around two weeks to return to your normal activities.
After open surgery, you'll usually have to stay in hospital for three to five days and your recovery time will be longer. It can take around six to eight weeks to return to your normal activities.

In either case, you'll need to arrange for someone to take you home from hospital. Someone should also stay with you for at least 24 hours if you go home the same day as your operation, as you may still be feeling the effects of the anaesthetic.

**Possible side effects of surgery**

You can live perfectly normally without a gallbladder, so there aren't usually any long-term effects from gallbladder removal surgery.

However, it's common to experience some temporary side effects while you recover, including:

- **swollen, bruised and painful wounds** – this should start to improve within a few days; regular painkillers such as [paracetamol](https://www.nhs.uk/conditions/gallbladder-removal/recovery/) may help reduce the discomfort

- **feeling sick** – you may feel sick as a result of the anaesthetic or painkillers you've been given, but this should pass quickly

- **pain in your tummy and shoulders** – this is a result of the gas used to inflate your tummy and should pass after a couple of days; painkillers can be taken to relieve the discomfort

- **bloating, flatulence and diarrhoea** – this can last a few weeks; eating high-fibre food such as fruit, vegetables, brown rice and wholemeal bread can help to firm up your stools, and your GP may also be able to prescribe medication to help

- **fatigue, mood swings and irritability** – these feelings should improve as you recover

These side effects are completely normal and not usually a cause for concern. You only need to contact your GP, the hospital or [NHS 111](https://www.nhs.uk/conditions/gallbladder-removal/recovery/) for advice if they're particularly severe or persistent.
Looking after your wounds

In many cases, dissolvable stitches will be used to close your wounds. These should start to disappear by themselves within a week or two.

If non-dissolvable stitches were used, you'll usually need to have them removed by a nurse at your GP surgery after 7-10 days. You'll be given an appointment for this before you leave hospital.

You'll be told about how to look after your wound and stitches, including how long any dressings need to stay on, when they should be replaced and when you can start having showers or baths. Read more about caring for your stitches.

There will be scars where the cuts were made in your tummy. These will probably be red and obvious at first, but should fade over time.

Getting back to normal

Your surgeon can give you specific advice about when you can return to your normal activities. Generally speaking, after keyhole surgery you can:

- **eat a normal diet straight away** – you can return to a normal diet even if you were advised to avoid certain foods before your operation, although you should try to have a generally healthy and balanced diet (read more about diet after gallbladder surgery)

- **do gentle exercises, such as walking** – but be careful not to push yourself too hard too soon and ask your surgeon or GP for advice about returning to more strenuous exercise

- **drive again after a week or so** – but first make sure you can wear a seatbelt and practice an emergency stop without feeling any discomfort

- **have sex as soon as you feel up to it** – but try not to place weight on your wounds until they've healed

- **return to work after 10-14 days**, depending on what your job involves
It can take a bit longer to return to these activities after open gallbladder removal surgery. For example, you may not be able to drive or return to work for around four to eight weeks.

**When to get medical advice**

Contact your GP, the hospital or NHS 111 for advice if you experience:

- a return of your original symptoms
- severe, excessive or increasing pain
- a high temperature (fever) of 38C (100.4F) or above
- persistently feeling sick and/or vomiting
- increasing swelling, redness or discharge from a wound
- yellowing of the skin and whites of your eyes (*jaundice*)
- dark urine and pale stools

These problems could be a sign of a complication of gallbladder removal surgery.

Page last reviewed: 27/01/2016
Next review due: 01/01/2019

Next page:

[Complications](#)

Previous page:

[What happens](#)
Gallbladder removal

1. Overview
2. What happens
3. Recovery
4. Complications

Hide sections ▼

- Infection
- Bleeding
- Bile leakage
- Injury to the bile duct
- Injury to the intestine, bowel and blood vessels
- Deep vein thrombosis
- Risks from general anaesthetic
- Post-cholecystectomy syndrome

Complications
Removal of the gallbladder (cholecystectomy) is considered a relatively safe procedure, but like all operations there is a small risk of complications.

**Infection**

Some people develop a wound or internal infection after a gallbladder removal.

Signs of a possible infection include increasing pain, swelling or redness, and pus leaking from a wound. See your GP if you develop these symptoms, as you may need a short course of antibiotics.

**Bleeding**

Bleeding can occur after your operation, although this is rare. If it does occur, it may require a further operation to stop it.

**Bile leakage**

When the gallbladder is removed, special clips are used to seal the tube that connects the gallbladder to the main bile duct. However, bile fluid can occasionally leak out into the tummy (abdomen) after the gallbladder is removed.

Symptoms of a bile leak include tummy pain, feeling sick, a fever and a swollen tummy.

Sometimes this fluid can be drained off. Occasionally, an operation is required to drain the bile and wash out the inside of your tummy.

Bile leakage occurs in around 1% of cases.

**Injury to the bile duct**

In around 1 in 500 cases, the bile duct is damaged during a gallbladder removal.

If this happens during surgery, it may be possible to repair it straight away. In some cases, further surgery is needed after your original operation.

**Injury to the intestine, bowel and blood vessels**
The surgical instruments used to remove the gallbladder can also injure surrounding structures, such as the intestine, bowel and blood vessels.

This type of injury is rare, occurring in around 1 in 1,000 cases, and can usually be repaired at the time of the operation. Sometimes injuries are noticed afterwards and a further operation is needed.

**Deep vein thrombosis**

Some people are at a higher risk of blood clots developing after surgery. This is known as deep vein thrombosis (DVT) and usually occurs in a leg vein.

This can be serious because the clot can travel around the body and could block the flow of blood into the lungs (pulmonary embolism).

You may be given special compression stockings to wear after the operation to prevent this happening.

**Risks from general anaesthetic**

There are several serious complications associated with having a general anaesthetic, but these are very rare.

Complications include allergic reaction and death. Being fit and healthy before your operation reduces the risk of any complications occurring.

**Post-cholecystectomy syndrome**

Some people experience symptoms similar to those caused by gallstones after surgery, including:

- tummy pain
- indigestion
- diarrhoea
- yellowing of the eyes and skin (jaundice)
- a high temperature (fever) of 38C (100.4F) or above

Informed consent obtained through misrepresentation mistruths about risks is outright deception and fraud

https://www.nhs.uk/conditions/gallbladder-removal/risks/
Postcholecystectomy syndrome (PCS)

S.S. Jaunoo*, S. Mohandas, L.M. Almond
Department of General Surgery, Worcestershire Royal Hospital, Worcester, UK

1. Introduction

Since its introduction by Muhe in 1986, laparoscopic cholecystectomy has rapidly gained in popularity and is now considered the treatment of choice for symptomatic gallstones disease. The advantages over laparotomy including reduced hospitalisation, pain, morbidity, better cosmesis and financial savings. There are over 50,000 performed annually in the UK and Ireland and more than half a million annually in the USA. Overall, cholecystectomy is an established successful operation which provides total relief of preoperative symptoms in more than 90% of patients. Following cholecystectomy, abdominal symptoms may range from 2% to 25% years. There may also be gender-specific risk factors for developing symptoms after cholecystectomy. In one study, the incidence of recurrent symptoms among female patients was 43%, compared to 28% among male patients.

2. Postcholecystectomy syndrome (PCS)

2.1. Definition

Postcholecystectomy syndrome is defined as the recurrence of symptoms similar to those experienced before the cholecystectomy. This usually takes the form of upper abdominal pain (mainly right upper quadrant) and dyspepsia, with or without jaundice.

2.2. Incidence

The incidence of postcholecystectomy syndrome has been reported to be as high as 40% in one study. The onset of symptoms may range from 2 days to 25 years. There may also be gender-specific risk factors for developing symptoms after cholecystectomy. In one study, the incidence of recurrent symptoms among female patients was 43%, compared to 28% among male patients.

2.3. Aetiological theories

The most common cause of postcholecystectomy syndrome is an overlooked extrabiliary disorder such as reflux oesophagitis, peptic ulceration, irritable bowel syndrome or chronic pancreatitis. The biliary aetiologies include:

1. Biliary strictures
2. Bile leakage
3. Retained calculi
4. Dropped calculi
5. Chronic biloma or abscess
6. Long cystic duct remnant
7. Stenosis or dyskinesia of the sphincter of Oddi
8. Bile salt-induced diarrhoea or gastritis

Bile duct injuries are the most serious complications associated with laparoscopic cholecystectomy, with a rate of occurrence as low as 0.2% but usually ranging from 0.4% to 4% for most surgeons. Many injuries may go unrecognized until the patient presents with symptoms of abdominal pain, sepsis or jaundice soon after
This is known as post-cholecystectomy syndrome (PCS) and it's thought to be caused by bile leaking into areas such as the stomach or by gallstones being left in the bile ducts.

In most cases symptoms are mild and short-lived but they can persist for many months. If you do have persistent symptoms, you should contact your GP for advice.

You may benefit from a procedure to remove any remaining gallstones, or medication to relieve your symptoms.