NHS

NHS Foundation Trust

Patient Information Service

St Michael's Hospital

Surgical day case unit

Cholecystectomy - what's involved?

After an assessment of your symptoms and following investigations, our advice is that you should have surgery to remove your gallbladder. The operation is called a cholecystectomy.

This brief note is meant to help you before surgery, by giving you the chance to go over these details at your leisure. It is advisable to have a complete understanding of the operation and any possible side-effects and complications.

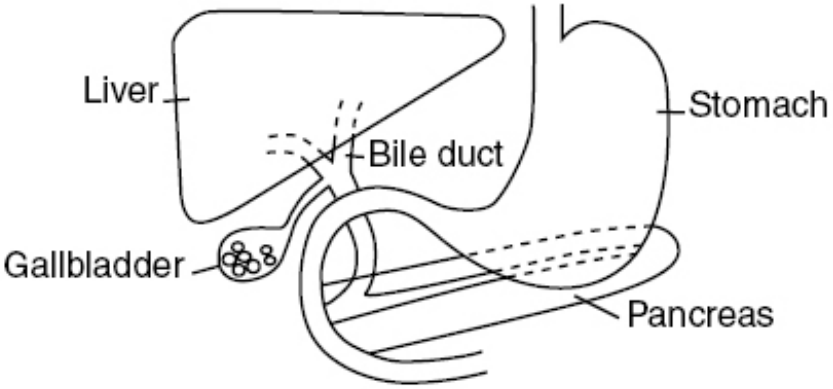
We hope this answers most of your questions.

What is the gallbladder and what does it do?

The gallbladder is a little pouch, about the size of a small pear, that is attached to the undersurface of the liver and is connected to the side of the bile duct.

The bile duct is the tube that carries bile from the liver (where it is made) to the gut where it mixes with fat in the food that you have eaten. Bile allows this fat to be digested.

The gallbladder stores a small amount of bile between meals but then squeezes this out when you eat to help digest your food when it is most needed.



Why do gallstones develop?

There are several different reasons why gallstones develop, including some rare medical conditions.

In the UK, gallstones are usually the result of our lifestyle, but the precise way they develop, and why some people get them while others do not, is unclear.

You are more likely to get gallstones if you are female, if you

are overweight, if it runs in your family, and as you get older.

Usually gallstones stay in the gallbladder where they can cause pain when the gallbladder squeezes by blocking the way out of the gallbladder.

If the gallbladder becomes inflamed and infected with bacteria then this can make the pain worse and last longer.

Usually this needs treating with antibiotics, but occasionally admission to hospital may be necessary.

If the gallstones leave the gallbladder they can pass down the bile duct and become blocked at its lower end (where it joins the gut).

This may obstruct the flow of bile into the gut and make you jaundiced (yellow). If this happens then the stone in the bile duct will need removing, as well as the gallbladder.

Occasionally a stone passes through the bile duct and can cause the pancreas gland to become inflamed. This is called pancreatitis. It is painful and can be serious.

Don’t I need my gallbladder?

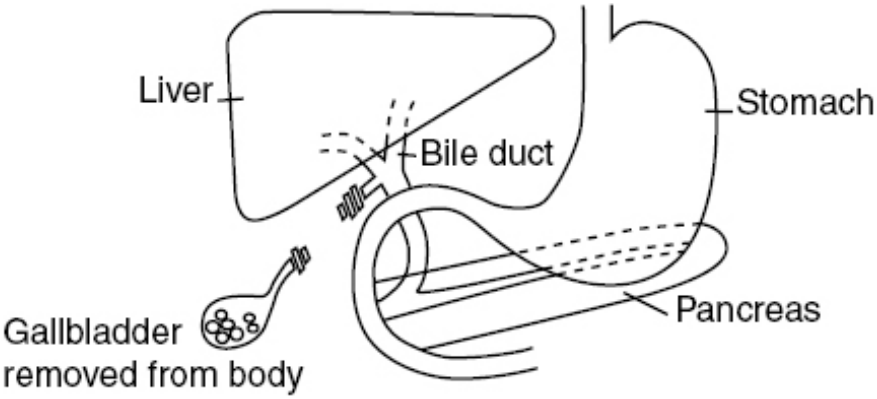
The gallbladder only stores a small amount of bile to help with digestion. For the majority of people, its removal produces no change in your ability to digest food and usually your eating will improve, as you will be without pain.

Some people notice that if they have heartburn (acid reflux disease), this may get worse after having their gallbladder removed.

Some people find their bowels become looser after having their gallbladder removed. If this does not settle over time and is significantly bothering you, try adopting a very low fat diet.

Sometimes, your doctor may give you a type of medication to help your body better handle the bile. This medication is called a bile salt binder, for example a drug called cholestyramine.

How will the gallbladder be removed?



Most people have their gallbladder removed by laparoscopic (keyhole) surgery. Four small holes are made in your abdomen and through these holes are placed a camera (to see inside the abdominal cavity), retractors to hold the tissues (so that a good view is obtained), and instruments to carry out the operation.

The connection between the gallbladder and the bile duct is secured with clips and the gallbladder is removed from the abdomen (through one of the holes that has been made for the insertion of the camera or of an instrument).

Sometimes it is not possible to perform the operation by keyhole surgery, in which case open surgery will be performed through a bigger cut in the upper part of the abdomen.

For some patients, this is known before the operation, and the procedure is planned as an open operation. If this applies to you, the reasons for this will be explained.

In other cases, the operation may be started by keyhole, but it needs to be changed to an open procedure while you are having the operation. This happens in about 3 in 100 people who are planned for keyhole surgery. This is most often because of inflammation which makes it hard to see the important anatomy inside of you or because of bleeding. If this happens to you, the team will explain to you the reasons for this once you have woken up from the anaesthetic.

If your pre-operative tests suggest that you may have a stone in the bile duct then this can be removed in one of three ways:

1. A flexible telescope can be passed through the mouth to the gut (while you are sedated) so that the stone can be removed from the bile duct from below. This procedure is called an ERCP and is usually carried out before the gallbladder operation.
2. The stone can be removed from the bile duct by keyhole surgery at the same time as your gallbladder operation.
3. Both the stone in the bile duct and the gallbladder can be removed by conventional open surgery.

Will the operation be painful?

The advantage of keyhole surgery is that it is a lot less painful than conventional open surgery.

Any operation, however, will cause some pain and we use several methods to minimise this. Firstly, at the end of the operation local anaesthetic is put into the wounds.

We will also give you other pain-killing injections or tablets to make sure you are as comfortable as possible. If it is necessary to have the conventional open operation then you will need stronger pain-killing drugs.

These can be given to you in various ways and the anaesthetist will explain this in more detail once you are in hospital, and will answer any of your questions.

How long will I be in hospital?

If the operation has been completed by keyhole surgery then you will not need to be in hospital very long. The actual time depends on how you feel after the operation and what arrangements have been made for your discharge.

Most people who have keyhole surgery go home on the day of their operation. If the operation is performed by the open method, you will need to stay in hospital, usually for 3 to 5 days.

What complications can occur?

As with all surgery, complications can occur following an operation to your gallbladder. One of the most common problems is feeling sick in the first 24 hours, so to minimise this we give you anti-sickness drugs during and after the operation.

Problems like bleeding, chest and wound infections and blood clots can also occur. The chance of clots or a chest infection is lowered by stopping smoking, and staying active and mobile after surgery. This is easier after keyhole surgery because it is less painful.

If you are female and on the combined contraceptive pill or on hormone replacement therapy (HRT) then these ideally should be stopped six weeks before the date of the operation. Please mention this to the doctor.

Other risks include having problems with a general anaesthetic. Some older patients, or those with other health problems such as a previous heart attack, are at higher risk of having another heart attack or other complications. Your team can explain to you in more detail about the risks particular to your situation.

Specific problems known to occur with laparoscopic cholecystectomy are:

1. **Leak of bile from the bile ducts or liver** – approximately 1 in 100. This can cause pain or infections and usually needs further treatment. This can include antibiotics, a telescope treatment into the bile duct (called an ERCP), insertion of a drainage tube through the skin into the affected area (carried out under local anaesthetic in the x-ray department) or another operation.

2. **Damage to the bile duct** – approximately 1 in 300. This can occur when surgery has been difficult because of severe gallbladder inflammation and can produce persistent pain and jaundice (yellowing of the skin). This usually requires further treatment, similar to leakage of bile from the bile ducts above, such as antibiotics, an endoscopic procedure, a drain or an operation.

3. **Stones in the bile duct** – approximately 1 in 100. These can cause very similar symptoms to your old pain. We try to find out if there are stones in your bile duct before we do your

operation using blood tests and scans. Stones in the bile duct can be removed using an endoscope (a flexible tube inserted into the gut through the mouth).

4. **Diarrhoea.** Some people find their bowels become more loose after having their gallbladder removed. In some people this causes diarrhoea. If this symptom does not settle of its own and is significantly affecting you, you can try adopting a very low fat diet or your doctor may give you a type of medication to help your body better handle the bile. This medication is called a bile salt binder, such as cholestyramine.

The figures given above come from a large study of gallbladder surgery for non-cancerous problems with the gallbladder in the UK and Ireland called 'CholeS' that has been published in the scientific literature. This can be discussed with your team if you would like more information.

Post-op care and instructions

How long will it take me to recover?

The advantage of keyhole surgery is a quicker return to normal activity and you should be able to go back to work fairly quickly.

After 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.

Returning to normal activities after keyhole surgery

There is no set time for when you can resume specific activities, as patients have different pain thresholds and recovery periods

after surgery. The time-lines below are a guide to give you an idea of what to expect after your operation.

There is specific advice for driving after surgery. To return to driving, you must be able to check your blind spot and perform an emergency stop, without being limited by pain.

We suggest you sit in a car without putting the keys in the ignition and check you can do these things without hesitating.

If you can do these things, we suggest you tell your insurance provider that you have had an operation and get their approval before starting to drive again.

Two weeks after your operation you may untertake:

- Brisk walking.
- Return to work doing light duties.
- Driving a car, riding a motorcycle.

Three to four weeks after your operation:

- Jogging, bowls.
- Driving a heavy goods vehicle.

Four to six weeks after your operation:

- Football, rugby and other contact sports.
- Tennis, squash, full golf.
- Workouts at the gym, weight lifting.
- Vacuum cleaning, carrying heavy shopping.

However the recovery time period is different for **open surgery**, and will usually take six to eight weeks before returning to normal activities such as driving.

Wound care

Keep your wound clean and dry until your stitches have dissolved or have been removed, or until the glue has dissolved.

Nurses - please tick where appropriate

☐ Please remove your dressings in seven days.

☐ Please arrange with your GP's practice nurse for your wound to be checked in ..... days.

☐ Your stitches are dissolvable.

☐ Your stitches need to be removed in ..... days. Please arrange this with your GP's practice nurse.

☐ Glue to skin, no intervention needed.

When should I seek help?

- If you have a discharge of blood or pus coming from your wounds.
- If you develop a fever above 101F (38.5C).
- Vomiting that continues more than three days after surgery.
- Persistent pain not relieved with your prescribed painkillers.
- Increasing pain or swelling around your wounds.
- Yellowing of the skin or eyes.

Will I need any check-ups?

We do not routinely see you again after uncomplicated gallbladder surgery. This is because the vast majority of patients recover very quickly after the surgery and have no need to be seen again.

If there are any specific reasons to be seen after your surgery then this will be arranged before your discharge or, alternatively, if you experience any problems while at home then we will want to see you again (your GP will usually contact us if you need to be seen again).

Alternatively, if you experience any problems while at home, we ask you to see your GP who will be able to manage most common problems. If needed, they will contact us to see you again.

We hope this leaflet has answered some of your questions and that you now know a little more about the operation.

If there is anything else that you would like to know please feel free to contact one of the members of the surgical team.

Where should I seek advice or help?

In the first instance seek advice from your GP or 111 if it is out of hours.

St Michael's Hospital

Between the hours of 7.00am and 8.00pm, Monday to Friday, you can contact the surgical day case unit on:

[redacted] or [redacted]

Notes

As well as providing clinical care, our Trust has an important role in research. This allows us to discover new and improved ways of treating patients.

While under our care, you may be invited to take part in research. To find out more please visit: [redacted]

Help us prevent the spread of infection in hospital. Please make sure your hands are clean. Wash and dry them thoroughly/use the gel provided. If you have been unwell in the last 48 hours please consider whether your visit is essential.

Smoking is the primary cause of preventable illness and premature death. For support in stopping smoking contact **NHS Smokefree** on **0300 123 1044**.

Drinkline is the national alcohol helpline. If you're worried about your own or someone else's drinking, you can call this free helpline in complete confidence. **Drinkline** on **0300 123 1110.**

To access all patient leaflets and information please go to the following address: **http://foi.avon.nhs.uk/**

Bristol switchboard: [redacted]

Weston switchboard: [redacted]

www.uhbw.nhs.uk

For an interpreter or signer please contact the telephone number on your appointment letter.

For this leaflet in large print or PDF format, please email [redacted]

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