

Laparoscopic Cholecystectomy

This leaflet is intended to provide a general overview of Laparoscopic Cholecystectomy.

What are Gallstones?

Gallstones are stones that form in the gallbladder. They are very common and can run in families.

How are gallstones formed?

The liver produces fluid called “bile”, which is stored in the gallbladder. When you eat, the gallbladder empties some bile into the intestines to help digest fats. Stones can develop in concentrated bile, due to a variety of reasons.

Most people have no symptoms with gallstones. In some people, gallstones can cause severe symptoms, such as abdominal pain - caused by the stones blocking the cystic duct, preventing emptying of the gallbladder, or by inflammation of the gallbladder (cholecystitis). The pain can be severe enough to require hospital admission.

If the stones move out of the gallbladder into the common bile duct, they can cause jaundice (yellow skin) and/or infection in the bile ducts (cholangitis).

Sometimes it can be severe enough to cause inflammation of the pancreas (acute pancreatitis). These complications can be very dangerous and may even result in death.

Your consultant may recommend that you have your gallbladder removed, a procedure known as Laparoscopic Cholecystectomy.

What are the benefits of surgery?

After surgery, you should be pain free and able to eat a normal diet. It will also prevent serious complications, which may occur due to your gallstones.

What are the alternative treatments?

Surgery is recommended, as it is the only definite way to treat the condition fully.

It is possible to dissolve the stones with medication but this treatment involves unpleasant drugs with many side effects. The results are often weak and the stones usually come back.

Antibiotics are used to treat infection in the gallbladder but this does not remove the stones. A low-fat diet will reduce the possibility of attacks. However, it is not a guarantee that they will not come back.

If I decide not to have surgery what will happen?

Your gallstones may not cause any symptoms. However, if you have had symptoms once, they are likely to recur from time to time. There is also the small risk of developing severe complications as listed above.

What happens before the operation?

Once you have been put on the waiting list for the operation, you will be seen in a pre-operative assessment clinic. You will be offered some routine blood tests and any other investigations (e.g. X-ray, ECG) needed to establish your suitability for general anaesthesia.

The nurse will give you instructions about fasting and if any of your routine medications need to be stopped before the operation.

You will come to hospital on the day of the operation. The surgeon will see you before the operation, and answer any further questions that you may have. The anaesthetist will also see you, and explain about the anaesthesia process.

What happens during the Laparoscopic (keyhole) surgery?

Most of the operations to take out the gallbladder are performed by the “keyhole” technique as there is less pain, less scarring, and early return to normal activities than after conventional surgery.

The operation is performed under a general anaesthetic and usually takes about an hour. Once you have been put to sleep, the surgeon inflates your belly with a harmless gas. This allows space to carry out the operation.

This gas will disperse naturally after the operation.

A small cut is made near the belly button to insert the telescope. Several other small cuts (usually 3 under the right rib cage) will be made to allow insertion of other instruments.

The surgeon will free up the gallbladder duct (cystic duct) and artery. Sometimes a contrast fluid is injected into the common bile duct (main bile channel) to take x-rays (cholangiogram). This will be discussed by your surgeon before the operation. The surgeon will separate the gallbladder from the liver and remove it through one of the small cuts. The cuts are usually closed with absorbable stitches. Occasionally, stitches or skin clips that need to be removed at a later date may be used.

If the X-ray shows any stones in the bile duct, the surgeon will try to remove them at the time, or arrange for them to be removed later using a camera (endoscopy) test (ERCP). Some patients may have a “drain”. This is usually left for a short period and removed before discharge from the hospital.

For about 1 in 100 people, it will not be possible to complete the surgery using the laparoscopic technique. If this is the case, the surgeon will convert to an “open” operation. The open operation achieves the same purpose, but will be performed through one larger cut, usually just under the rib cage on the right side.

What happens after the operation?

You will be taken to the recovery room, where the nurse will measure your heart rate and blood pressure, and check your dressings. You will be offered a drink once you have recovered from the anaesthesia.

The cuts on the skin will be sore, and you will be given painkillers for this. You may get some pain in the shoulders, following laparoscopic surgery, because some gas may be left under the diaphragm. Your body will absorb this over the first 24 hours and this should ease the symptoms. You may also feel sick or be sick, and will usually require some anti-sickness medications.

How soon will I recover?

The majority of patients are able to go home on the day of surgery, provided that there is someone to look after you overnight. If this is not possible, you should be discharged the day after. You will be able to eat and drink normally after you have recovered from your anaesthetic. If you have the open operation, your stay will be longer - perhaps lasting up to five days.

You should be able to return to work after 2 - 4 weeks. You should avoid heavy lifting (more than 5 kgs) for 6 weeks. Regular exercise will help you return to normal activities, however, you should talk to your doctor before starting any strenuous exercise.

What are the possible complications?

Complications may include but not limited to the following:

General complications

- Bleeding- During or after surgery, there can occasionally be heavy bleeding and you may need a blood transfusion. In some cases, you may even need to return to the operation theatre.
- Infection – You may have a chest infection or wound infection which, in some cases, may need drainage (re-opening and packing of the wound) or further surgery.
- Blood clots in the legs (DVT) can move through the bloodstream to the lungs. This can be very dangerous, even causing death. You will be assessed for your risk to DVT before your surgery and given blood thinning injections. You will also be given anti-embolic stockings to wear until you are fully mobile to reduce the risk.
- Damage to internal organs when inserting instruments into the abdomen (1 in 1000) - If an injury does occur, you may need open surgery to correct it and it might involve a larger cut than expected. About 1 in 3 of these injuries may not be obvious at the time of surgery and may require further operation later. If your pain does not reduce, or gets much worse after the surgery, then you should tell your surgeon immediately.

Specific complications of laparoscopic cholecystectomy

- Leaking of bile- can be dealt with at the time of operation, but may need further surgery or drains (1/200).
- Bile duct injury (1 in 500) - This can be potentially serious and likely to need further surgery to correct it.
- Retained stones in the common bile duct = If these cannot be dealt with during the operation, they will be removed later using a flexible endoscope (ERCP).
- Damage to the liver or its blood vessels (less than 1 in 500) - These are rare and may require further surgery to correct.
- A cracking sensation in the skin due to trapped gas - this usually settles quickly and is not serious.
- Inflammation in the abdomen (peritonitis) due to a collection of bile or blood.

Long term complications

- Persistent symptoms- This can happen in 1/30 patients and it usually suggests that the gallstones weren't the "cause" of these symptoms in the first place. Your surgeon will discuss this with you during the consultation.
- Diarrhoea can occur because you no longer have a gallbladder to store bile and control its flow into the intestines.
- Hernia at the site of the incision caused by the muscle layers failing to heal together. This appears as a bulge or rupture known as 'incisional hernia'.
- Chronic pain- This is rare and usually happens at the site of insertion of the instruments.

Any personal pre-existing conditions may further increase the risk of surgery. These will be discussed with you at the time your consent is taken to proceed with surgery. Please ask any questions or discuss any concerns at this time.

Further questions?

This leaflet is intended to provide a general overview of Laparoscopic Cholecystectomy. It is not intended to serve as a substitute for professional medical care, or a discussion between you and your surgeon.

If you have any questions about the operation or subsequent follow up, discuss them with your surgeon before or after the operation.

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Notes:

Patient Advice and Liaison Service

The team are available to help with any concerns, complaints or questions you may have about your experience at the Trust. Their office is in the Main Foyer (Gate 4) of Doncaster Royal Infirmary. Contact can be made either in person, by telephone or email.

The contact details are:

Telephone: 01302 642764 or 0800 028 8059

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