



A Laparoscopic Cholecystectomy is an operation where the gallbladder (and usually the stones contained within) is removed using “key-hole” surgery under general anaesthetic.

Four small holes (port-sites) are made in the abdominal wall and the abdomen is distended with carbon dioxide gas. The main part of the operation involves the identification and division of two structures going to the gallbladder. These are the cystic artery and the cystic duct; they are clipped, tied or stapled. Thereafter an x-ray is taken to check the biliary duct system from the liver down to the duodenum. The gallbladder is then separated from the liver using high frequency electric current and removed from the abdominal cavity, usually through the port-site in the belly button. The operation is performed as a day case or with an overnight stay. Surgery is performed laparoscopically in over 95% of cases. Conversion to an open operation may occur if the surgeon has difficulty accurately locating or safely dividing one of either the cystic duct or cystic artery. Where this occurs a larger incision is made under the ribs on the right to allow the operation to proceed safely.

What happens before the operation?

At a pre-assessment visit you will be seen by a doctor or nurse. You will have specific tests to ensure your fitness for surgery, which will depend upon your general medical health. The purpose of this visit is to spot any abnormalities well in advance of surgery and to make sure that there are no delays prior to timely, successful completion of your

operation. An ultrasound scan of the liver and biliary tree (gall bladder, biliary duct system and pancreas) will have been arranged as well as blood tests of liver function. These are to confirm the diagnosis, usually of gallstones and to determine the likelihood of any stones having left the confines of the gallbladder and travelled out into the duct system.

What happens just before the operation?

You will be admitted to a surgical unit. A senior nurse will complete the admission process detailing your current condition, ongoing medical problems and medications as well as personal details such as next of kin. You will be permitted to eat up until six hours before surgery and drink clear fluids at the discretion of the doctors, usually up to two hours before the operation. An Anaesthetist will visit you prior to your surgery to discuss the nature of your anaesthetic and methods of pain control both during and after the operation. Your surgeon will visit you and discuss the operation again, asking you to sign a consent form once you are happy that all your questions have been answered and the risks and benefits have been explained to you.

What are the complications of the operation?

Although there are infrequent risks attached to this operation the nature of the surgery means that these may be significant.

Infection – Wounds and Abdominal cavity

The nature of the surgery means that infections are uncommon. They are usually no more complicated than a skin infection (usually around the umbilicus) although in rare cases the accumulation of infected fluid around the liver may result in abscess formation. This is more common when operations are undertaken on an urgent basis and may require complex drainage procedures to treat them.

Bleeding

Gall bladder surgery involves the division of one important and many minor blood vessels. Although meticulous care is taken to prevent bleeding it is a recognised but small risk of such operations. It may require a return to the operating theatre.

Bile leaks

A leakage of bile may occur from the cystic duct or from the liver bed at the time of surgery or some days later causing pain and fever. Usually this is self-limiting and requires only pain relief but it may be more complicated requiring a drainage procedure or in very rare cases reoperation.

Retained Gallstones

Despite the best intentions of the surgeon and the investigations undertaken before surgery, gallstones may be found at operation or at a later stage in the future, outside the gallbladder in the biliary duct system. Stones can be removed at operation but may require intervention with ERCP in the future.

Injury to the common bile duct and other organs

The common bile duct drains the liver of bile. The cystic duct is very closely related to this structure and is at risk of damage. Any injury to it can result in significant post-operative complications and the need for further surgery with complex reconstructive surgery. The risk is of the order of 1 in 1000 cases.

Blood Clots – Legs, Lungs, Brain and Heart

Operations on the abdomen increase the chance of clots developing in the deep veins of the legs and pelvis. This is very unusual after laparoscopic cholecystectomy. Problems of this kind are avoided by the administration of medication to thin the blood during your hospital stay and with early mobilisation shortly after surgery.

Diarrhoea

Around 5% people notice more frequent and/ or looser stools after cholecystectomy that may be persistent. This is thought to relate to impairment of the absorption of dietary fat after the operation and in some cases patients may benefit from medication in the long term.

What will happen after the operation?

Wounds on your abdomen will be closed with either stitches or paper strips and covered with a dressing.

You may have one or more intravenous drips providing you with fluids but you will be able to start drinking and eating immediately after surgery.

You will be given a combination of pain killers by mouth on waking from surgery. Stronger intravenous painkillers are always available if required.

Some discomfort after surgery is normal but pain and nausea can be treated and even avoided altogether if doctors and nurses on the ward are informed about these problems by you, early on.

What happens next?

You may stay in hospital overnight or be able to go home as long as you have no significant pain or nausea. A capable adult must remain with you for 24 hours after the operation. After your operation the affected gallbladder will be very closely examined by Pathologists under a microscope.

What happens after hospital?

How soon you go home after the operation depends on how quickly you recover from surgery and who is at home to help you. Before discharge you will be advised how to care for your wounds. There are no limitations on showering. Bathing should be avoided for a week. Stitches in some larger port-sites are absorbable and may be ignored. Sticky paper strips are used to close the smaller wounds; these will fall off after a few days. Most people are largely back to normal at a week after such surgery but it may take up to three weeks before you can say that you are fully recovered from the operation. You will be able to resume a normal diet including fat. As you leave hospital your General Practitioner will be informed of your treatment and the plans for your follow up. You may be given or sent an appointment to be seen in the outpatient

How will I feel when I go home?

Initially it is not unusual to feel a little tired following your operation. Discomfort should be minimal and controlled with simple pain killers used in combination. You will be prescribed these on discharge. If you feel that pain is increasing, that nausea and bloating are not settling and particularly if you develop a fever or sweats you should get in touch with your hospital or surgeon urgently. It is important to rest initially when getting home, but it is equally sensible to slowly increase your level of activity. Listen to your body and stop when you begin to tire. You are advised not to do any heavy lifting for six weeks after the operation. Driving should be avoided for at least a week. The main area of concern is your ability to perform an emergency stop. Check with your car insurance company regarding the cover you have following an operation.