

Laparoscopic Colectomy



The Gallbladder

The liver produces a substance called bile. This is a green coloured liquid that helps the body to digest fats. Bile contains water, cholesterol, fats, bile salts and bilirubin. Bile salts break up the fat, and bilirubin gives bile and stools their colour. The bile is stored in the gallbladder until it is needed to digest fats. At this time the gallbladder contracts and empties the bile into the bile duct and then into the intestine to mix with undigested food.

Gallstones are formed when the bile stored in the gallbladder hardens into pieces of stone-like material. Gallstones are mainly composed of cholesterol. Most patients with gallstones remain symptom-free for many years and may, in fact, never develop any symptoms. However the symptoms of gallstones may be severe, ranging from brief episodes of biliary pain to potentially life-threatening complications, such as acute infections of the gallbladder or pancreas.

It is accepted that the best treatment for symptomatic gallstones is the removal of the gallbladder by keyhole surgery (laparoscopic cholecystectomy).

Complications of Gallstones

Gallstones that are confined to the gallbladder usually only cause intermittent episodes of pain, known as biliary colic. When a stone blocks the exit of the gallbladder the flow of bile is occluded, which can cause infection and inflammation of the gallbladder, called acute cholecystitis. The patient may have a temperature, severe upper right sided abdominal pain and may vomit.

When gallstones enter the common bile duct they can cause jaundice, cholangitis and pancreatitis.

Jaundice is caused by the stone blocking the flow of bile into the intestine. This leads to absorption of bilirubin into the bloodstream – causing yellow pigmentation of the skin and eyes.

Cholangitis can be caused by a stone blocking the flow of bile. Cholangitis is an infection of the biliary system. The infection can reach the liver if not treated properly, which can result in inflammation of the liver and eventually liver abscesses.

Pancreatitis occurs when a gallstone passing through the bile duct occludes the pancreatic duct leading to inflammation of the pancreas.

Rarer complications of gallstones include perforation of the gallbladder, erosion of the gallbladder into the bowel (cholecysto-enteral fistula) and passage of a gallstone into the bowel leading to a bowel obstruction.

Laparoscopic Cholecystectomy

Removal of the gallbladder is called cholecystectomy.

The most common method of removing the gallbladder is using a laparoscopic

A laparoscope is a small telescope which is attached to a small camera and light source to enable the internal abdominal cavity to be visualised. Three or four small incisions are made into the abdomen, through which the telescope and laparoscopic instruments are inserted. Gas is passed into the abdominal cavity to inflate it, so that the gallbladder can be seen more easily.

Because the incisions are small, laparoscopic surgery is less painful than the open technique. Most patients can go home a day or two after surgery.

Occasionally the surgeon may need to convert from laparoscopic to open cholecystectomy. This procedure is carried out infrequently and because it leaves a longer scar you will require a longer stay in hospital. The surgeon may choose to perform an open cholecystectomy if he/she feels it is safer for the patient.

Benefits of This Type of Surgery

Having a laparoscopic cholecystectomy means that you may be able to return to work more quickly, have less pain after surgery, have a shorter hospital stay, and have a shorter recovery time.

With the laparoscopic cholecystectomy, you will probably only have to stay in the hospital for a day or two. Whereas if you had an open cholecystectomy you may find that your hospital stay is increased to approximately 5 days. Also, because the incisions are much smaller with the laparoscopic technique you will find that the pain you experience will be a lot less than if you had the traditional open cholecystectomy.

Risks and Complications

Serious complications arising from laparoscopic cholecystectomy are uncommon. All types of surgery are associated with a certain degree of risk and it is important that these risks are explained fully to the patient in order for an informed decision to be made. The risks are associated both to the anaesthesia and the surgery itself.

- There is small risk of injury to the bile duct
- Injury to internal organs
- Injury to major blood vessels
- There is a small risk of bleeding, infection and hernia formation
- In the event of a stone(s) being found in the bile duct there is a slight chance that further procedures will be required
- Here is a 1 to 3% risk that keyhole surgery may need to be converted to an open gallbladder operation. The chances of this are higher in complex cases and patients who have had previous abdominal surgery.

After the Surgery

You will normally be able to resume normal daily activities after one week. It is important that you follow your doctor's instructions. You may experience some mild to moderate pain and it is important that you take your pain medication as prescribed.

Nausea and vomiting are not uncommon after this type of surgery and your doctor can prescribe medication to help relieve these symptoms. If these symptoms persist then you should inform your doctor.

About 20% of people will have diarrhoea after having their gallbladder removed. Eating plenty of high fibre foods can help absorb excess water and make bowel movements more bulky.

When to Call the Doctor

It is important that you inform your doctor if you experience any of the following symptoms after your surgery:

- Fever
- Pain that is not relieved by medication
- Redness and pain at the wound site
- Any pus or discharge from wound
- Bleeding
- Persistent cough or shortness of breath
- You are unable to tolerate fluids and diet
- Persistent nausea and/or vomiting
- Chills
- Increased abdominal swelling.