



Total Upper GI Surgery

WEIGHT LOSS | REFLUX | CANCER | GENERAL SURGERY

Laparoscopic Cholecystectomy & Intra-operative Cholangiogram

Gallstones are stones which form within the gallbladder. It is a common problem which develops in 1 in 5 people. The liver produces bile which helps with the absorption of fat. The gallbladder is where bile stored within the abdomen and travels to the bowel through a small duct called the bile duct. Gallstones are commonly associated with a diet high in fat and can cause symptoms including pain, bloating, nausea and vomiting. Occasionally, stones can travel into the bile duct causing obstruction, which lead to jaundice (yellow). Complications include inflammation of gallbladder and pancreas or blockage of the bile duct causing infection.

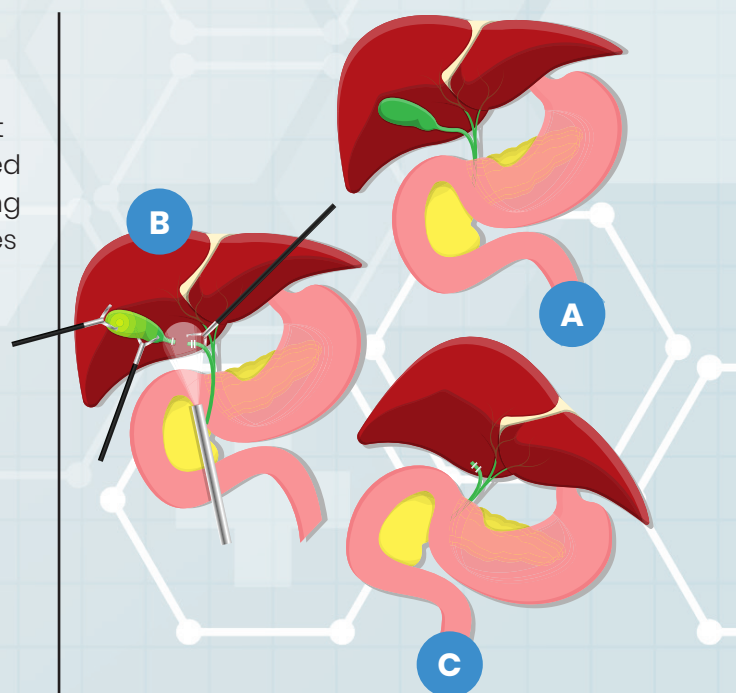
What are the advantages of surgery?

Advantages include:

- ✓ Alleviation of symptoms
- ✓ Prevention of complication including inflammation of gallbladder, pancreas or obstruction of the bile duct

What are the options for surgery?

Cholecystectomy (removal of gallbladder) is usually



A. Normal (pre-operative) anatomy

B. During operative

C. Post-operative anatomy

performed as a laparoscopic (keyhole) procedure. It is usually a safe and effective procedure for the removal of the gallbladder. Your surgeon will discuss the operative approach based on your clinical symptoms, previous surgery and medical problems.

What if I don't have surgery?

Surgery is the recommended standard of care in the management of gallstones. If you undertake a non-operative approach, the following should be considered and discussed with your surgeon.

- 1. Symptoms can sometimes be controlled with analgesia/antibiotics/low fat diet**
- 2. Gallstones can be treated with medications but these treatments have side effects and high failure rate**
- 3. Gallstones can be left alone and monitored if asymptomatic** (unless diabetic)
- 4. Gallstones can progress with time or become more symptomatic**

What does the surgery involve?

The surgery can generally be performed as a day or overnight procedure. The surgery will be performed under General Anaesthesia. Local anaesthetic and intravenous antibiotics will be administered during the procedure. Occasionally if the surgery is extremely difficult the procedure will be converted to an open procedure.

Laparoscopic (keyhole) surgery involves 4 small incisions below your umbilicus. The abdominal cavity will be inflated with gas to create space for your surgery to be performed. Surgical instruments will be introduced to assist in removing your gallbladder. Metal clips will be placed on the duct (Cystic) and artery (Cystic) leading to the gallbladder. These clips will remain in the body. During the procedure the bile duct will be examined for stones using a contrast medium injected into the bile duct and x-rays performed. If stones are found, an attempt to remove the stones at the time may be undertaken. The gallbladder and instruments will then be removed via the cuts. Your surgeon will close the small cuts with sutures. Occasionally your operation will be converted from laparoscopic to an open operation.

Things to know?

Fasting

Generally, you will need to fast for 6 hours prior to surgery. Your surgeon will provide instructions when booking your surgery. If you are unsure or have any concerns please contact our team.

Medications

Discuss with your surgeon/anaesthetist all the medications you take, particularly any blood thinning (warfarin, aspirin, clopidogrel, Xarelto, Eliquis, Pradaxa) or herbal medications. Your surgeon will advise which medications need to be ceased prior to surgery.

Smoking

Your surgeon will advise you to stop smoking prior to surgery. Smoking increases the risk of developing complications post-operatively.

Weight

Any weight you can lose prior to surgery will improve the outcomes following surgery. Overweight patients have a higher risk of developing complications following surgery. Some people find fatty or spicy foods can worsen symptoms.

Exercise

Regular exercise improves lung and heart function which improves recovery following surgery. Seek the advice of your surgeon or GP prior to surgery.

General information

Pregnancy - please advise your surgeon if there is any possibility you are pregnant.

Hair removal - in the week prior to the procedure do not shave/wax in the region of your surgery.

Hygiene - have a shower the day before or day of surgery.

Please discuss any other questions with your surgeon.

Complications

Your surgeon and their team will make your surgery as safe as possible, however complications do occur. Some of these can be serious and even cause death.

Common risks and complications

Pain - can occur following surgery. Local anaesthesia and oral analgesia will be given to help you move about freely and cough.

Bleeding - can occur and may require a return to the operating theatre. Bleeding is more common if you take blood thinning medications.

Infection - can occur requiring antibiotics or further treatment. If your wound develops redness or discharge please advise your surgeon as soon as possible.

Urinary retention (1 in 100) - following surgery you may have difficulty passing urine. Occasionally a urinary catheter will need to be placed.

Wound - thickened scarring of the skin may occur. Small pockets of fluid (seroma) can develop and usually resolve without treatment.

Lungs - small areas of lung can collapse and pneumonia develop. Antibiotics and physiotherapy may be required.

Clots - a blood clot in the leg (deep vein thrombosis DVT) or lung (pulmonary embolism - PE) can develop following surgery. DVT may present with swelling, pain or redness in the leg. PE can present with shortness of breath, chest pain or bloody cough. Further treatment with blood thinners may be required if these develop.

Wound infection, chest infection, heart and lung complications and blood clots are more common in people who are overweight, smoking or have a history of diabetes. Emergency surgery increases the risk of these complications.

Uncommon risks and complications

Include:

Bile - damage to the bile duct or bile leak can occur following or during surgery. This may require further surgery or procedures.

Stones - gallstones may be found outside the gallbladder or spill from the gallbladder during surgery and be lost in the abdominal cavity.

Conversion to open surgery - laparoscopic technique may not be possible and your surgeon may need to convert to open surgery.

Damage to surrounding structures – damage to large blood vessels, bile duct, gut and bladder may occur during surgery.

Heart and lung complications – rarely gas used to inflate the abdomen can cause heart and lung complications. Heart attack or stroke can occur due to strain on the heart.

Adhesions – scar tissue may form leading to a bowel obstruction.

Hernias – hernias can form at the site of incision. It is recommended that no strenuous exercise be performed for 4-6 weeks following surgery.

Anaesthetic risks are uncommon however you should discuss these risks with your anaesthetist. Death as a result of this procedure is rare.

What to expect following surgery

The majority of patients make a full recovery following a laparoscopic cholecystectomy.

Following the operation you will be transferred to the recovery area and then to the ward. You should be able to be discharged the same day or day after surgery. You should discuss this with your surgeon. If you do go home the same day, you will need to be observed for several hours following and taken home by a responsible adult or via taxi. An adult should be with you for 24hrs following surgery.

You should talk to your surgeon if you develop any of the following:

- ✓ **Worsening pain, especially with walking or coughing**
- ✓ **A high temperature or fever**
- ✓ **Dizziness or shortness of breath**
- ✓ **Swelling of the abdomen or wound**
- ✓ **Not opening bowels or passing wind**
- ✓ **Difficulty passing urine.**

If you do not improve over the week following surgery, please contact your surgeon or GP. Do not drive following surgery until you have complete movement, sensation and function.

Do not drive if taking opiate analgesia. Do not drive until you feel you can safely control your vehicle. Do not consume alcohol for 24hrs following general anaesthesia.

You can usually return to normal activities one week following surgery. Do not do any strenuous activities or heavy lifting for 4-6 weeks following surgery. Please discuss with your surgeon prior to commencing strenuous exercise.

i This document contains general information only as at the date of publication and should not replace advice obtained by your treating doctors applicable for your specific circumstances.

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