

#### LAPAROSCOPIC CHOLECYSTECTOMY PATIENT INFORMATION LEAFLET

This leaflet contains all the information you require about having a laparoscopic cholecystectomy and the recovery postoperatively you can expect. For more details about the gallbladder and its function please go to the relevant pages on the website.

## Is the gallbladder important? Do I need it?

The gallbladder is a storage vessel for the bile produced by the liver. It is not essential and almost everybody manages perfectly well without one. A few people notice their bowels opening more frequently or may become looser after a cholecystectomy, but this is relatively rare.

## What is a laparoscopic cholecystectomy?

Laparoscopic surgery is also known as "keyhole" surgery. This means that rather than using a single cut (incision) of 10-30cm on your abdomen a few smaller (1-3cm) incisions are made.

Cholecystectomy means surgical removal of the gallbladder. The gallbladder is the small, pear-shaped pouch in the upper right part of your abdomen which stores the bile produced by the liver. Bile, the digestive fluid that helps to break down fatty food, is carried from the gallbladder to the intestine through a tube called the bile duct.

Normally 4 cuts are made on the abdomen, as shown below. The abdomen is inflated with harmless carbon dioxide gas. A telescope-like camera (a laparoscope) is placed through the incision, just below the umbilicus, and this then guides the placement of the instruments through the other incisions. The gallbladder is identified and retracted to show the relevant anatomy as clearly as possible. The tube (cystic duct) that allows drainage of bile from the gallbladder into the main tube (common hepatic duct) that drains bile from the liver is cleaned and clearly visualised. There is an associated blood vessel (cystic artery) that lies closely to the cystic duct and is also cleaned and clearly visualised. Both these structures have clips placed on them and are then divided (cut). This then allows the gallbladder to be removed from the liver and taken out of the abdomen via the incision below the umbilicus. At the end of the operation, before you wake up, all the puncture sites in your abdomen will be injected with local anaesthetic so that when you regain consciousness you should feel a minimum of discomfort.



Sometimes the surgeon finds it unsafe or too complex to remove your gallbladder via the keyhole method. In these few cases (2-5% of cases) the gallbladder will be removed using the traditional "open" operation. This involves making a 10-30cm incision below your right ribcage and removing the gallbladder as described above.

It is occasionally necessary to perform a special X-ray of the tubes draining the liver and the gallbladder (cholangiogram) to ensure that there are no stones within the tubes (cystic duct, common hepatic duct or common bile duct

# Is the surgery safe?

Both the laparoscopic and traditional open methods of removing the gallbladder are very safe. It is, however, a major operation and as a result carries some risks and complications:

## The general risks of any operation under a general anaesthetic include:

Infection
Bleeding/Bruising
Pain (chronic)
Deep vein thrombosis or pulmonary emboli
Stroke or mini-stroke
Heart attack
Risk of a general anaesthetic, including the rare incidence of death

### The risks specifically related to a laparoscopic cholecystectomy:

Risk of converting from keyhole to an open operation (2-5%)
Leakage of bile from the bile ducts into the abdomen (about 1 in 100)
Damage to the main common bile duct or other part of the biliary tree (about 1 in 500)

Damage to bowel or other major structures e.g great vessels etc (about 1 in 1000) Slipped or retained gallstone within the biliary tree

Tendency towards a looser stool

Post-cholecystectomy syndrome

Change in appearance of the umbilicus



If you experience increasing abdominal pain or have not opened your bowels or passed wind after 48 hours or develop fevers, yellowing of the skin and vomiting then you need to seek urgent medical attention either from your GP or local Accident and Emergency department.

### What is post-cholecystectomy syndrome?

Post-cholecystectomy syndrome (PCS) is the term to describe the persistence of biliary colic or right upper quadrant abdominal pain with a variety of gastrointestinal symptoms similar to those in patients with cholecystitis prior to cholecystectomy.

The main symptoms associated with PCS are:

Fatty food intolerance

Nausea

Vomiting

Heartburn

Flatulence

Indigestion

Diarrhoea

Jaundice

Intermittent abdominal pain

PCS normally presents in the early post-operative period but can occur years later.

10-15% of patients experience some part of PCS post-operatively. The treatment for PCS depends on the symptoms experienced by the patient and the outcomes are related to the treatments implemented.

## What happens if my biliary tree is damaged?

There are many reasons why part of the biliary tree may become damaged during a laparoscopic cholecystectomy. Abnormal biliary anatomy, excessive scarring or inflammation or even Mirizzi syndrome are a few examples of scenarios where it can be very difficult if not impossible to separate the gallbladder from the biliary tree without damaging it.

A full pre-operative work-up will allow the surgeon to tell if the patient is at a higher risk than normal of sustaining damage to the biliary tree.



If any part of the bile duct becomes damaged during the operation then the operation will be converted to an open procedure and a biliary reconstruction operation will be carried out.

### Will I have a local or a general anaesthetic?

A laparoscopic cholecystectomy is performed under a general anaesthetic. You cannot eat anything for 6 hours before your operation, but you may have sips of water up to 4 hours before your operation. You should take your usual medication, as directed by your doctor, on the morning of the operation.

Local anaesthetic will be administered to the wounds to ensure a comfortable recovery post-operatively.

#### Will it hurt?

Any operation gives some degree of discomfort. The most common complaint is of shoulder tip pain. This occurs as a result of the brain confusing signals from the diaphragm and the shoulder. It is known as referred pain. This pain should last about 24 hours and gradually recede. The small incisions on your abdomen will have been injected with local anaesthetic at the end of the operation and are normally quite comfortable at the end of the operation. Most patients require some simple pain killers (analgesia) for 7-10 days after the operation, which will be given to you on discharge from the hospital. If you experience worsening abdominal pain whilst at home then you should contact a doctor or attend the Accident and Emergency department for further evaluation.

It is important that you take the analgesia regularly for 72 hours post-operatively. Then after this time the analgesia can be reduced as you need it.

Non-opioid medication is prescribed alongside some opioids. If do not want to have opioid analgesia prescribed then this can be arranged.

## How soon can I go home?

After a laparoscopic cholecystectomy you will feel well enough to go home on the same day as the operation, although you have to stay at least six hours after the operation to ensure there are no immediate problems.



However, if your operation is at The Manor Hospital in Oxford, and Mr Bond-Smith is your Consultant Surgeon, then you will be advised to stay overnight so that Mr Bond-Smith can review you in the evening of your operation and then again in the morning after your operation to answer any questions and to ensure you are comfortable throughout your stay.

If your operation is converted to an open operation then you may be in hospital for up to 5 days and will require several weeks (6-8 weeks) of recuperation at home.

## What happens with my dressings?

All the wounds are closed with dissolvable stitches under the skin and nothing needs to be done to these after the operation. Each of the wounds is covered with a waterproof glue. The stitches will disappear on their own and the glue will flake off after 7 days.

This manner of closing the wounds allows the patient to have a shower or bath immediately post-operatively. However long soaks in the bath are to be avoided in the first few days.

You may find that the wound in your bellybutton oozes clear fluid, or even a creamy looking fluid, and generally takes a bit longer to heal than the other wounds. This is generally nothing to worry about.

The major red flags relating to wound healing are:

The wound turning a bright red colour
The wound becoming very hot
The wound becoming excessively tender
The wound becoming swollen

You will be booked in for a 2-week wound check at the Manor Hospital in Oxford to ensure that the wound is healing normally. This appointment can be brought forwards if required.

If you have any worries about your wounds, you should contact Mr Bond-Smith's medical secretary on 07951 601722.



### When can I get back to normal?

It will probably only be a matter of days before you get back to normal, however you will be fully mobile as soon as you leave the hospital.

You can drive when you can comfortably make an emergency stop and look into your blind spot unhindered.

Nothing heavier than a full kettle should be lifted for the first two weeks. However, during the first 2 weeks it is important to try and walk everyday for 15-20 minutes in the morning and then again in the afternoon.

Other more energetic activities can be re-introduced after two weeks so that by 6 weeks all normal activities are being carried out.

A 2-week sick note will be prescribed on discharge.

## Do I need to go for check-ups?

Before you leave hospital you will be advised about your wound check clinic date and then a date for your 6 week follow-up appointment will be sent to you a few days later.

#### Do I have to eat a special diet?

You do not need to have a special diet after the operation. You should aim to enjoy a healthy, balanced diet.

# Contact the medical secretary of Mr Bond-Smith, Katie, directly on 07951 601722 if:

- Pain is increasing after 48 hours, despite taking the supplied painkillers regularly
- You have fever
- You develop yellow discolouration of skin or eyes (jaundice)
- You are vomiting or have a tight abdomen after 48 hours
- You have not had a bowel motion or passed any wind after 48 hours