Operation

Four small incisions are made in the wall of the abdomen and tubes the thickness of pencils are inserted and instruments introduced through them. The inside of the abdomen can then be visualised and the gallbladder detached and removed by drawing it out through the incision in the umbilicus. Sometimes it is not possible to perform the operation this way (eg because of difficulty seeing clearly) and then the operation is completed through a normal incision ("Open Cholecystectomy"). The operation usually lasts about half an hour.

Please refer to *Laparoscopic Cholecystectomy Patient Information Sheet*

Risks

For any operation there are risks, and in particular there is a risk of infection, bleeding and injury. The overall risk of major complications is 2%. The specific risks in laparoscopic cholecystectomy (LC) are bleeding (1 in 200), liver injury (1 in 100), leaking or injured cystic duct (1 in100), bowel injury (1 in 1000) and bile duct injury (1 in 1000). Surgery is required generally to repair these, and sometimes extensive surgery. The risks of the surgery are greater depending to a large degree on how damaged the gallbladder is and how stuck it is to adjacent structures. The most common outcome is no complications or a minor problem that will pass such as wound infection (5%). The anaesthetist will discuss the risks of the anaesthetic with you.

After the Operation

Patients usually start drinking fluids after about 4 hours and should be able to go home in 1 or sometimes 2 days. It is common to feel tired and run down for a week or so and most patients need 2 weeks convalescence before returning to work. It is common to feel aches and pains around the incision sites and sometimes around the back and shoulders. This settles over the few days to a week after the operation and is treated by simple painkillers such as Panadol. There is no restriction to your diet. It may be surprising that it is very rare that removing the gallbladder (which is important in the digestion of fat) results in any noticeable dietary changes.

General Advice

Preoperative Medication

Mostly these should be continued. If you are unsure whether your medication needs to be stopped prior to surgery please ask your surgeon. Please check with your surgeon in particular if you are on any of these medications as they often need to be stopped or modified preoperatively.

Warfarin/Plavix/Iscover/Clopidogrel

These are blood thinners that are generally stopped before surgery. Patients may need to consult with the physician who started the medication before stopping these for surgery. Often an alternative medication is used to thin the blood preoperatively.

Diabetes medication

If you are a diabetic please ensure that you inform your surgeon. Diabetics on tablets are generally asked to not take these while fasting for surgery. If you are on insulin this should still be taken but at a modified dose. Your anaesthetist, physician or GP may need to be involved to choose the correct dose.

MR GEOFFREY DRAPER, JANUARY 2011

Aspirin

This increases the risk of bleeding during surgery but the risk of stopping may be unacceptable and so often it is not stopped for surgery. Nonetheless, please ensure that you advise your surgeon if you take Aspirin.

Shaving

The operative field will need to be clear of hair. This can be done either by the patient or once in hospital, it is up to the patient. If the patient elects to do the shave but it is inadequate in extent or quality this will be amended once in theatre. The abdomen needs to be clear of all hair from the nipple line to 5cm below the umbilicus.

Dressings

If a dressing is clean, dry and comfortable it can be left untouched until the next visit to the surgery. If it is dirty, wet or uncomfortable it should be removed and advice sought if there are any concerns. If you have had an operation involving mesh (inguinal hernia, abdominal wall hernia etc) it is most important to keep an eye out for features of infection.

Driving After Surgery

Before driving again there are two requirements that must be fulfilled: you must be physically comfortable, and mentally confident. After surgery it is common to feel tired and lacking in concentration: everything requires more effort. The test to apply is whether you would hesitate slamming your foot on the brake in an emergency. Clearly if you are uncomfortable just getting in and out of the car you are not able to drive. For major surgery this could take a month or so. Patients who have a minor day procedure as a day case should not drive that day.

Obesity

Overweight patients can experience increased difficulties with surgery. The increase in depth of the fat layer means that it is more difficult for the surgeon to see structures and incisions may need to be longer, pain is therefore greater and recovery slower and complications more common. There is an increased risk of bleeding and infection in particular.

Smoking

We should all be aware that smoking causes lung cancer, emphysema, strokes, heart attacks and blocked arteries to the legs. Smoking also affects surgery. The lining of the tubes in the lungs secretes mucus in response to the irritation of the inhaled smoke. This becomes longstanding so that even if a person stops smoking for a day the increase in mucus production continues. During an anaesthetic the natural mechanisms to remove mucus are stopped, the mucus accumulates in the lung and causes blockages which allows bacteria to multiply and cause pockets of infection which very quickly develop into pneumonia. After the operation smokers have trouble with frequent coughing. This strains their incision and causes pain. Stopping smoking before an operation is strongly recommended. Some operations will be cancelled if patients continue to smoke. Four weeks is the suggested minimum time to give up before surgery.

Travel

Blood becomes thicker and more likely to clot after surgery and this effect lasts for some time afterwards, generally around 4 weeks. The other effects of travel, particularly plane travel, are to make the blood thicker by dehydration and the effects of sitting for a long time. This combination makes it easier for a clot to form in a leg vein and cause a deep venous thrombosis (DVT). The clot can then detach and flow along the vein to block off part of the vessels supplying the lung ("Pulmonary embolus"). The way to counter this is to drink plenty of water, get up and move around or at least regularly move the balls of the feet up and down.

If additional measures need to be taken (eg travel immediately after surgery, on the oral contraceptive pill) then you should consider wearing TED stockings, or even an injection of a blood thinner (eg clexane) before travelling. You should discuss any concerns you have with your surgeon.

Psychological

It is common to feel tired and depressed after surgery. Your body does not want you to expend energy on anything other than healing the tissues that have been operated on. Having an operation feels a bit like having the flu: everything seems to take more effort and your tolerance level (and those around you) is put to the test. Fortunately these unpleasant feelings pass.

Scars

The scars initially will be pink to red, and the skin and underlying fat will be thick and lumpy. New capillaries grow in (to give it nutrition) making it pink, fibre is laid down (to make it strong) making it thick. It is at a maximum three weeks after an operation. After this it becomes soft and thin and supple. To gain the best appearance of a scar it is necessary to avoid putting a strain on the scar during the first few weeks after an operation. Keep it clean and dry and avoid creams until the skin is well sealed. Most of the normal redness, thickness and lumpiness should resolve by about 3 months.