Laparoscopic Cholecytectomy

Important information

Please read your admission letter carefully. It is important to follow the instructions we give you about not eating or drinking or we may have to postpone or cancel your operation.

Please bring with you any medications you use and its packaging (including patches, creams, inhalers, insulin and herbal remedies).

Take your medications as normal on the day of the procedure **unless** you have been specifically told not to take a drug or drugs before or on the day by a member of your medical team. If you have diabetes please ask for specific individual advice to be given on your medication at your pre-operative assessment appointment.

About the operation

Mr Jourdan has recommended that you undergo an operation to treat your gallstones.

Gallstones form in the gallbladder. Any imbalance in the constituents of bile can result in the formation of gallstones. It is likely that the high fat diet in the Western world contributes to the increasing incidence of gallstone disease. About 1 in 3 women, and 1 in 6 men, form gallstones at some stage in their lives. They become more common with increasing age and can also occur during pregnancy due to hormonal changes. Gallstones can present in various ways, though a proportion cause no symptoms whatsoever and are picked up on routine ultrasound scans. Upper abdominal pain is the most common symptom, which is characteristically very severe, lasts for several hours and requires strong painkillers to provide relief. Fatty foods can often precipitate an attack which generally occurs at night after an evening meal. Gallstones can also cause indigestion like symptoms. Occasionally the pain can be confused with angina or a heart attack. If gallstones migrate from the gallbladder they can cause jaundice, pancreatitis and even bowel obstruction.

Intended benefits of surgery

The operation aims to remove the diseased gallbladder and the stones it contains. This will stop all symptoms caused by irritation of the gallbladder by the gallstones.

It will also prevent complications of gallstones developing including cholecystitis, obstructive jaundice and pancreatitis.

Can I manage without my gall bladder?

Yes. The gall bladder is a reservoir for bile and we are able to manage without it. Rarely patients notice that their bowels are a little looser than before the operation but this is uncommon. You will be able to eat a normal diet after your operation, assuming that there is nothing else wrong with you.

Before your admission

Before your operation you will need to attend the pre-assessment clinic, which is usually run by specialist nurses; occasionally this process can be conducted by telephone. At this clinic, we will ask for details of your medical history and carry out any necessary clinical examinations and investigations. Please ask us any questions about the procedure, and feel free to discuss any concerns you might have at any time. You may have a blood test and ECG performed, and also swabs for MRSA.

We will ask if you take any tablets or use any other types of medication either prescribed by a doctor or bought over the counter in a pharmacy. Please bring all your medications and any packaging (if available) with you.

This procedure involves the use of anaesthesia. We explain about the different types of anaesthesia or sedation we may use at the end of this leaflet. You will see an anaesthetist before your procedure.

Day of surgery

Most people who have this type of procedure have it performed as a day case procedure. You may need to stay overnight if you have other medical problems.

You will be admitted on the day of your surgery. Just before surgery the nurse may give you an enema to empty the bowel.

It may be necessary during the procedure to shave your thigh to allow attachment of a pad for the electrical diathermy machine (used to seal blood vessels), so that the pad sticks to your skin to achieve the best and safest performance.

During the procedure

At the start of your procedure, you will be given the necessary anaesthetic and/or sedation

Mr Jourdan will make four cuts (about 5-10mm long) on the skin, 3 above and one at your navel.

Carbon dioxide gas is then pumped into the abdomen. This creates room for your surgeon to work in and makes it easier to see the internal organs.

The laparoscope (a long, thin telescope with a light and camera lens at the tip) is then passed through the cut at your navel. Mr Jourdan will examine the internal organs by looking at a video screen. Specially adapted surgical instruments are passed through the other cuts to allow dissection and removal the gall bladder. X-ray pictures may be taken to look at the bile duct during the operation. The gallbladder is removed through the cut at the navel. At the end of the procedure the carbon dioxide is removed and the skin is closed with fine stitches under the skin which will dissolve over time.

After the procedure

Once your surgery is completed you will usually be transferred to the recovery ward where you will be looked after by specially trained nurses, under the direction of your anaesthetist. The nurses will monitor you closely until the effects of any general anaesthetic have adequately worn off and you are conscious. They will monitor your heart rate, blood pressure and oxygen levels too. You may be given oxygen via a facemask, fluids via your drip and appropriate pain relief until you are comfortable enough to return to your ward.

Eating and drinking: You may eat and drink normally, and we recommend a high fibre diet and fluid intake of at least six to ten glasses of water daily.

Getting about after the procedure: We will encourage you to get up and walk about within one to two hours after your operation. This helps improve your recovery and reduces the risk of certain complications. If you have any mobility problems, we can arrange nursing or physiotherapy help.

Pain relief and wound care: You should expect some pain around the wounds. It is also common to experience some shoulder tip pain in the first 24 hours. In order to minimise the pain associated with your operation, a number of measures will be taken. At the time of surgery, local anaesthetic is injected into the wounds. This will provide pain relief for several hours after surgery. You will be given painkillers to take by mouth. There may be some ooze from the wounds and the nursing staff may need to change your dressings. You should aim to keep the wounds dry for the first three days. The dressings are normally waterproof so showering is possible.

Leaving hospital. Discharge from hospital will be the same day (for planned daycase surgery) or the following day. You may be given a copy of your discharge summary which contains documentation of your admission. You will be given necessary tablets or medicines to take home with you – for example, painkillers and laxatives.

Check-ups and results: You will be seen at 4 weeks after surgery but if there are problems before this date then you can call the hospital or Mr Jourdan's secretary for advice.

What can I expect once I go home ?

If you need them, continue taking painkillers as advised by the hospital. General anaesthesia can temporarily affect your co-ordination and reasoning skills, so you should not drink alcohol, operate machinery or sign legal documents for 48 hours afterwards.
Normal activities, including returning to work, can usually be resumed after about a week. You shouldn't drive until you feel you could do an emergency stop without discomfort. If you are in any doubt about driving, please contact your motor insurer so that you are aware of their recommendations, and always follow your surgeon's advice.
About 1 out of 5 people (20 percent) will have diarrhoea after having their gallbladder removed. Eating plenty of high fibre foods such as brown rice, wholemeal bread and pasta can help absorb excess water and make your bowel movement more bulky.

Significant, unavoidable or frequently occurring risks of this procedure

Removal of the gallbladder is a very common and a very safe procedure. However, like all operations there are small risks involved. It is very important that you are fully aware of these risks. It is not always possible to complete the operation via the keyhole route and it may be necessary to make a cut under the ribs on the right hand side. This is not a complication but a necessary action taken to ensure your safety. The possible complications below are particularly important as they can result in a longer stay in hospital or further operations.

- **Bleeding** – this very rarely occurs after any type of operation. Your pulse and blood pressure are closely monitored after your operation as this is the best way of detecting this potential problem. If bleeding is thought to be happening, you will require a further operation to stop it. This can usually be done through the same keyhole scars as your first operation.

- **Infection** – this can affect your scars ('wound infection') or can occur inside your abdomen. Again this can happen after any type of abdominal operation. Simple wound infections can be easily treated with a short course of antibiotics. Infection inside your tummy will also usually settle with antibiotics. Occasionally, it may be necessary to drain off infected fluid from inside your tummy. This is most frequently performed under a local anaesthetic by our colleagues in the X ray department.

- **Leakage of bile** – When we remove the gallbladder, we put special clips on the tube that connects the gallbladder to the main bile duct draining the liver. Despite this, sometimes bile fluid leaks out. If this does occur, we have a number of different ways of dealing with this. Sometimes the fluid can simply be drained off by our colleagues in the X-ray department. In other cases we will ask some other colleagues to perform a special test called an ERCP. This is a procedure where you are made very sleepy (using sedative injections)

and a special flexible camera ('an endoscope') is passed down your gullet and stomach to allow the doctor to see the lower end of your bile duct. The doctor then injects a special dye that allows them to see where the bile has leaked from. If they see where the bile is leaking from, they will insert a plastic tube (called a 'stent') into your bile duct to allow the bile to drain internally. This stent is usually removed six to eight weeks after it is put in. Rarely, if a patient develops a bile leak, an operation is required to drain the bile and wash out the inside of the abdominal cavity. This can usually be performed as a keyhole procedure.

- **Injury to bile duct** – Injury to the main bile duct draining bile from the liver to your intestine is a rare (1 per 400 cases) complication of gallbladder surgery. We use a number of techniques during the operation to prevent this happening. If an injury occurs, it requires immediate repair so that you recover smoothly from the operation.

- **Injury to intestine, bowel and blood vessels** – Injury to these structures can, very rarely, occur during the insertion of the keyhole instruments and during the freeing up of the gallbladder particularly if it is very inflamed. Usually this injury can be seen and repaired at the time of the operation, but occasionally may only become clear in the early postoperative period. If we suspect that you may have sustained such an injury, a further operation will be required. This will be performed as a keyhole operation but may need conversion to an open operation.

- **Blood clots in the legs (DVT)** – Before your operation, you will be fitted with some stockings that you wear during your operation to help prevent blood clots developing in the veins of your legs. You may also be given an injection in the skin of your tummy - this is a blood thinning medicine (Heparin) that also helps prevent blood clots.

- **Urinary retention** - if you suffer form urinary symptoms due to a large prostate you might be at increased risk of urinary problems

after surgery.

In the period following your operation you should contact the hospital or Mr Jourdan if you notice any of the following problems:

- increasing pain, redness, swelling or discharge
- bleeding
- difficulty in passing urine
- high temperature over 38º or chills
- nausea or vomiting

The Anaesthetic

Anaesthesia means 'loss of sensation'. There are three types of anaesthesia: general, regional and local. **The type of anaesthesia chosen by your anaesthetist depends on the nature of your surgery as well as your health and fitness**.
Sometimes different types of anaesthesia are used together.

Before your operation: Before your operation you will meet an anaesthetist who will discuss with you the most appropriate type of anaesthetic for your operation, and pain relief after your surgery.
To inform this decision, he/she will need to know about:
your general health, including previous and current health problems
whether you or anyone in your family has had problems with anaesthetics
any medicines or drugs you use
whether you smoke
whether you have had any abnormal reactions to any drugs or have any other allergies
your teeth, whether you wear dentures, or have caps or crowns.

Your anaesthetist may need to listen to your heart and lungs, ask you to open your mouth and move your neck and may review your test results.

Pre-medication: You may be prescribed a 'premed' prior to your operation. This a drug or combination of drugs which may be used to make you sleepy and relaxed before surgery, provide pain relief, reduce the risk of you being sick, or have effects

specific for the procedure that you are going to have or for any medical conditions that you may have. Not all patients will be given a premed or will require one and the anaesthetist will often use drugs in the operating theatre to produce the same effects.

Before starting your anaesthesia the medical team will perform a check of your name, personal details and confirm the operation you are expecting.

You will usually change into a gown before your operation and we will take you to the operating suite. When you arrive in the theatre or anaesthetic room, monitoring devices may be attached to you, such as a blood pressure cuff, heart monitor (ECG) and a monitor to check your oxygen levels (a pulse oximeter). An intravenous line (drip) may be inserted and you may be asked to breathe oxygen through a face mask.

The Anaesthetic: During general anaesthesia you are put into a state of unconsciousness and you will be unaware of anything during the time of your operation. Your anaesthetist achieves this by giving you a combination of drugs.

While you are unconscious and unaware your anaesthetist remains with you at all times. He or she monitors your condition and administers the right amount of anaesthetic drugs to maintain you at the correct level of unconsciousness for the period of the surgery. Your anaesthetist will be monitoring such factors as heart rate, blood pressure, heart rhythm, body temperature and breathing. He or she will also constantly watch your need for fluid or blood replacement.

Mr Jourdan will inject some local anaesthetic into the surgical site. This will give excellent pain control in the hours following surgery. When the effects of the local anaesthetic wear off your pain will need to be controlled with pain-killers taken in tablet form.

After the Anaesthetic: Most people will feel fine after their operation. Some people may feel dizzy, sick or have general aches and pains. Others may experience some blurred vision, drowsiness, a sore throat, headache or breathing difficulties.

What are the risks of anaesthesia?

In modern anaesthesia, serious problems are uncommon. Risks cannot be removed completely, but modern equipment, training and drugs have made it a much safer procedure in recent years. The risk to you as an individual will depend on whether you have any other illness, personal factors (such as smoking or being overweight) or surgery which is complicated, long or performed in an emergency.
Very common (1 in 10 people) and common side effects (1 in 100 people)
Feeling sick and vomiting after surgery Sore throat
Dizziness, blurred vision Headache
Bladder problems
Damage to lips or tongue (usually minor) Itching
Aches, pains and backache Pain during injection of drugs Bruising and soreness
Confusion or memory loss

Uncommon side effects and complications (1 in 1000 people)
Chest infection Muscle pains
Slow breathing (depressed respiration) Damage to teeth
An existing medical condition getting worse
Awareness (becoming conscious during your operation)

Rare (1 in 10,000 people) and very rare (1 in 100,000 people) complications
Damage to the eyes
Heart attack or stroke
Serious allergy to drugs
Nerve damage
Death

Deaths caused by anaesthesia are very rare. There are probably about five deaths for every million anaesthetics in the UK.