Colectomy

Key messages for patients

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 read this information carefully, you and your health professional will sign it to document your consent.

Please bring with you any medications you use and its packaging (including patches, creams, inhalers, insulin and herbal remedies) and any information that you have been given relevant to your care in hospital, such as x rays or test results.

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 colectomy

Mr Jourdan has recommended surgery to remove part of the colon (large intestine) – termed a colectomy. This operation aims to remove a diseased portion of the bowel. Colectomy is recommended for certain bowel cancers, and for other diseases of the colon such as diverticular disease and inflammatory bowel disease (Crohn's or ulcerative colitis).

The main function of the colon is to absorb fluid to produce a formed stool. When part of the colon is removed most people do not experience a large change in their bowel habit. In general, the more that is removed, the more likely it is that the bowel habit would become more frequent and/or a little looser. This is not always predictable, however.

Intended benefits

The aim of the surgery is to remove the disease process causing your symptoms – whether it is cancer, inflammation, pain or blockage. For most patients this will provide a cure or significant improvement of their bowel problems. For cancer operations, surgery gives the best chance of cure, but the treatment may need to be combined with chemotherapy and/or radiotherapy. Even in cancer surgery, where certainty of cure is difficult to guarantee, the benefits should be long lasting.

Before your admission

You will need to attend the pre-assessment clinic, which is usually run by specialist nurses. 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.

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 any packaging with you. You may have a blood test and ECG performed, and also swabs for MRSA.

Your operation will require a general anaesthetic. We explain about the different types of anaesthesia and post operative pain relief at the end of this leaflet. You will see an anaesthetist before your procedure to discuss the best options for you.

Most people who have this type of procedure will need to stay in hospital for two to six days after the operation. Those with medical problems or special needs may need to stay in hospital longer.

Day of surgery admission

Most patients are admitted on the day of surgery. Mr Jourdan may require you to have your bowels cleared with a strong laxative the day before surgery or you may simply be given an enema on arrival at the hospital. Patients having a right sided colectomy usually need no preparation of the bowel.

Hair removal before an operation

If you need hair removal from the surgical site this will be done using an electric hair clipper with a single-use disposable head, after you have been anaesthetised. Please do not shave the hair yourself or use a razor to remove hair, as this can increase the risk of infection. An electrical conducting plate is usually applied to the skin of your thigh – it may be necessary to shave this area if the hair is thick.

During the procedure

Before your procedure, we will give you the necessary anaesthetic - see below for more details. Your anaesthetist will also discuss post-operative pain relief with you and if you are having an epidural this may be put in before you are anaesthetised. You will need to have a catheter inserted once you are asleep so we can measure urine output. This will be removed within the first few days after the operation.
Mr Jourdan performs almost all colectomies with keyhole surgery. Very rarely it is not possible to complete the operation with keyhole techniques and a laparotomy (traditional cut in abdomen) needs to be performed. The risk of this rises if you are over weight or have had a previous laparotomy.
The first part of the procedure is to assess the abdominal contents. The disease in your

colon is checked but the other parts of the abdomen – for example the liver, stomach, small intestine or ovaries are also checked.
The colon is then mobilised (freed up from its surrounding attachments) so that it can be safely removed, along with some of the mesentery (a flat fatty sheet that carries the blood vessels and lymph drainage from the bowel). In most cases the remaining bowel ends can be joined up again either using special stapling instruments or sutures.
If a stoma (where the bowel is brought out to the skin) is needed then this will have been discussed in advance. At the end of the operation the abdominal wall is stitched together and then the skin is closed, often with absorbable sutures (so there is no need for stitches to be removed after the procedure).
During surgery, you will lose blood but the amount is usually very small. If you lose a significant amount of blood you may require a transfusion. The likelihood of getting a serious side effect from a transfusion of blood or blood component is very low.

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. You will also have a tube (catheter) in your bladder to drain away urine – this enables careful measurement and avoids the need for you to get out of bed to urinate.
After certain major operations you may be transferred to the intensive care unit (ICU/ITU) or high dependency unit (HDU. These are areas where you will be monitored much more closely because of the nature of your operation or because of certain pre-existing health problems that you may have. If Mr Jourdan or his anaesthetist believe you should go to one of these areas after your operation, they will tell you and explain to you what you should expect.

Enhanced recovery

Where possible we make use of 'enhanced recovery' principles to minimise the impact of surgery on the body and enable a rapid return to normal activity. There are many aspects to this process which includes preoperative, intraoperative and post operative procedures. We aim to minimise pain, perform careful surgery, avoid unnecessary drips, tubes and drains, encourage you to eat and drink soon after your operation, encourage early mobilisation and allow you to go home as soon as is safe. You will need to be an active participant to truly benefit from an enhanced recovery programme.

Resuming normal activities including work

Most people who have had this procedure can get back to normal activities within four to six weeks.

Initially you will feel more tired than usual but this should not stop you from doing anything, because activity is beneficial. For driving you need to feel safe and to be able to brake in an emergency – this often takes two to four weeks. When going back to work see if you can start half days or work a little from home until your energy levels are improved.

Special measures after the procedure

Sometimes, people feel sick after an operation, especially after a general anaesthetic. If you feel sick, please tell a nurse and you will assessed and may be offered medicine to make you more comfortable.

Pain control

Most patients will have had a spinal anaesthetic which is effective for the first 12 hours after surgery. Occasionally a patient will have an epidural. Very occasionally (but more often with a laparotomy) a patient will have a button controlled infusion pump of morphine (PCA). Oral painkillers are then given as the spinal wears off.

Eating and drinking

After your operation, you may drink and eat as soon as you feel like it. You should start slowly and eat and drink small amounts until you are confident that your body is ready. If you feel sick or bloated then you should let the nursing staff know cut back on oral intake until you feel better.

Getting about after the procedure

We will help you to become mobile as soon as possible after the procedure. This helps improve your recovery and reduces the risk of certain complications. You will have daily injections which reduce the chance of blood clotting in your legs (a DVT). Typically, you will be helped into a chair the following day. If you have any mobility problems, we can arrange nursing or physiotherapy help.

Leaving hospital

Most people who have this type of procedure will need to stay in hospital for two to five days. Sometimes complications arise and these will delay discharge. When you go home we would expect you to be mobile, comfortable and able to eat safely. The actual time that you stay in hospital will depend on your general health and how quickly you recover from the procedure.

Significant, unavoidable or frequently occurring risks of this procedure

Surgery to remove part of the bowel is a major operation and there are certain risks known to be associated with it. These include the risks of surgery in general, the risks particularly associated with bowel surgery and the risks of anaesthetic described in more detail at the end of this information sheet. The general risks of surgery include problems with the wound (for example, infection), breathing (for example, chest infection), heart (for example, abnormal rhythm or occasionally a heart attack), blood clots (for example, in the legs or occasionally in the lung) and kidneys (for example, kidney failure). Those specifically related to colectomy include problems with the seal where the bowel has been joined. These include leakage, a transient blockage of the bowel, bleeding or infection in the abdominal cavity. Occasionally, further surgery is required to put right such complications. If there is a leak from the bowel join (anastomotic leak) surgery is often required and this may require a stoma to be created; this is a serious complication but with a risk in the order of 5%.

Sometimes during the operation it becomes apparent that the disease is more complicated than was anticipated: the type of surgery may need to be altered to take this into account. This may mean removing more bowel or part of a nearby organ (for example small intestine, bladder or ovary). The consent form you sign will include this possibility. If there is any part of you which you specifically do **not** wish to be removed then this must be written clearly on the consent form before signing.

When a colectomy is performed it is almost always possible to join the two ends of the remaining bowel together afterwards. Very rarely, due to unforeseen circumstances this may not be possible and the bowel may need to be brought out to the skin as a stoma (for example colostomy or ileostomy). If there is a significant possibility of this Mr Jourdan will have let you know and you will be counselled by a stoma nurse prior to the operation.

Most people will not experience any serious complications from their surgery. The risks increase for the elderly, those who are overweight and for those who already have heart, chest or other medical conditions such as diabetes or kidney failure. There is a tiny risk of death. You will be cared for by a skilled team of doctors, nurses and other health care workers who are involved in this type of surgery on a daily basis. Any problems that arise can be rapidly assessed and appropriate action taken.

Alternative procedures that are available

For most of the conditions where colectomy is advised the only alternative to surgery is medical treatment with drugs. Where there is a cancer of the bowel, drug treatment alone will not cure the disease. If you were to decide against surgery then your cancer would progress, though usually quite slowly over months. This could result in bleeding, the development of a blockage in the bowel and eventually the spread of cancer to

other parts of the body.

For inflammatory conditions surgery is usually recommended when medical treatment has failed to control the symptoms. Where there is a narrowing of the bowel it is sometimes possible to stretch this from within using a special balloon, though often surgery is the better option.

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: For most patients having a keyhole colectomy the anaesthetist will inject a spinal anaesthetic which containing local anaesthetic and opiate pain-killer. This gives good pain relief during surgey and for the first 12 hours after surgery. Once the spinal is in you will be given a general anaestheic. 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.

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.