Emergency laparotomy

This leaflet explains what to expect if you are having an emergency operation for a sudden or serious medical problem in the abdomen (stomach area).

What is an emergency laparotomy?
An emergency laparotomy is a surgical operation that is used for people with severe abdominal pain to find the cause of the problem and in many cases to treat it. You will have a general anaesthetic and the surgeon will make an incision (cut) to open the abdomen (stomach area). Often the damaged part of an organ is removed and the abdomen washed out to limit any infection.

An emergency laparotomy might be carried out for several reasons including bowel obstruction (blockage), bowel perforation (burst) and bleeding in the abdominal cavity (internal bleeding). These are conditions which if left untreated could be life-threatening. An emergency laparotomy is used either to save life or to limit illness, and in many cases it might be the only option available in order for the patient to get better.

What happens before surgery?
A member of the surgical team will assess you fully, ask you questions about your symptoms and examine you. You will have some blood tests carried out and a CT scan is normally required to help make a diagnosis and plan treatment.

Once a decision has been made that an operation is needed, a senior surgeon will visit you to explain the procedure and ask for your written consent. An anaesthetist and sometimes a member of the intensive care team will also assess you before your surgery. This team of doctors will be able to tell you about the risks of the operation compared to the risks of your illness without surgery.

If you are too unwell to consider the risks and give your consent, then the surgeon is legally able to act in your best interest and proceed with the operation without having written consent. If this is the case, it will be discussed with your family or carers and two doctors will sign the consent form together. If you have a written advance directive (living will), then that will be used to inform the doctors about your wishes.

Timing of surgery
If your condition is very serious, the laparotomy will take place soon after the decision has been made that it is needed, sometimes within two hours. If your condition is less serious, the operation may be delayed to allow further tests and treatment to take place.

The role of your anaesthetist
Your anaesthetist will discuss the general anaesthetic with you and any particular risks relating to your medical condition. They will also decide whether intensive care is needed to help you recover.
Pain relief
Your anaesthetist will discuss with you how your pain will be managed after the surgery. You will be given regular pain relief medicines which may include one of the following:

- **Wound catheters** – very fine soft plastic tubes which are placed under the skin on each side of the wound by the surgeon during the operation. They are connected to a pump that continuously delivers local anaesthetic which helps relieve the pain from the wound. They can stay in for several days after your operation.

- **An epidural** – a fine plastic tube that your anaesthetist will place between the bones of your back. This is usually done just before you go to sleep. Local anaesthetic is given through this tube during the operation and for a few days afterwards. Your chest, abdomen and legs may feel numb whilst the epidural is being used, and your legs may not feel as strong as normal. This is to be expected while the epidural is working and will return to normal when the local anaesthetic wears off.

Surgical drains and tubes
During the surgery it is common to have a number of tubes and drains inserted:

- The surgeon or a nurse will insert a catheter (soft plastic tube) into your bladder to drain away and measure the urine that you produce.

- The surgeon may place some drains in your abdomen to prevent infected fluid from accumulating during the recovery period.

- You may have a naso-gastric tube (soft plastic tube that is placed in the nose and goes down as far as the stomach). This helps drain fluid from your stomach and stops you being sick. Sometimes this is inserted on the ward before surgery. This tube may also be used to help with feeding after surgery.

- There will be a cannula in a vein in your arm to allow intravenous fluids and medicines to be given. Occasionally, your anaesthetist may also place a cannula in a vein in the side of your neck for the same purpose.

These tubes and drains will be reviewed daily after your operation. Most can be removed within 48 to 72 hours.

A stoma
Some people need a stoma after an emergency laparotomy. The team looking after you will tell you if this is a possibility for you.

A stoma is formed when one of the ends of the bowel is brought out through a hole in your abdomen and stitched to the surface of your abdomen. This arrangement diverts faeces from your bowel directly into a disposable bag. A stoma is normally a temporary arrangement that allows the bowel time to heal. This healing can take three to six months, after which time you would be offered another operation to rejoin your bowel and have the stoma removed. Occasionally a permanent stoma is required after this kind of operation.

If a stoma is formed during your surgery you will meet the specialist stoma nurses who will teach you how to care for it.
What happens after surgery?
Depending on your condition before and during the surgery, you may need to spend some time in the high dependency unit (HDU) or intensive care unit (ICU) afterwards. The team looking after you will decide if this is necessary.

If you have developed significant lung or heart problems the anaesthetist and intensive care team may decide that you would benefit from a period when a ventilator is used to support your breathing. If this happens you would remain anaesthetised on the ICU until you are well enough to be allowed to wake up and breathe for yourself.

Further surgery may be needed in the days following your initial operation. There are many reasons for this. Often, it is simply to check that the bowel is beginning to heal and to assess and treat any areas of infection.

Complications
This is emergency surgery and complications are common. These can include straightforward complications such as urine and wound infections which can usually be treated with good results. Major, potentially life-threatening complications such as failure of vital organs can also happen. Treatment of organ failure in the ICU is often successful in allowing recovery.

With this in mind, the surgical team will always consider other treatment options when deciding whether or not an emergency laparotomy operation is right for you. They will give you advice based on their experience and on the information they have from the investigations they have done. Your wishes and your opinion are extremely important in the decision making process.

Recovery from emergency laparotomy
There are several important aspects to your recovery after emergency surgery, which will be addressed:

- **Physiotherapy** – it is very important after major surgery that you take deep breaths and cough effectively. This helps to prevent chest infections. Physiotherapists will visit you during your recovery to give you advice and breathing exercises to help with this.

- **Nutrition** – good nutrition is an essential part of your recovery. It often takes several days for your bowels to work normally after an emergency laparotomy. During this time you may feel bloated and have very little appetite. You may feel sick and sometimes be sick. Your surgeon will advise you on how much fluid and food you can have in these early days. They may prescribe anti-sickness medicines if nausea is a particular problem. If you are unable to start eating after two to three days, your surgeon may give you liquid nutrition through a naso-gastric tube or through a cannula into a vein.

- **Pain relief** – the surgical team will strive to ensure that you are comfortable at every stage during your recovery. If you have needed a local anaesthetic infusion (either as an epidural or directly into your wound) this will continue for about three days after the operation. You may be given morphine as well during this time. It is important that you are given sufficient pain relief to enable you to cough effectively. Please ask the nurses if you need more pain relief. After about three days you should need less morphine and more simple pain relief medicines such as paracetamol.

- **Exercise** – this may seem a long way off, but it is important to gradually build up your fitness after your operation, as you feel able. The nurses and physiotherapists will help you with this. Getting back on your feet reduces the risk of complications such as deep vein thrombosis (blood clots) and chest infections. You will have daily injections while you are in hospital to prevent blood clots.
How long does it take to recover?
Recovery depends on the surgery, severity of the illness, your age and any other health conditions you may have. We aim for you to be eating within three to four days and home within seven to fourteen days. It can take around three months to return to normal activities but as long as a year to feel fully recovered.

If you have any questions or would like more information after reading this factsheet please ask the medical team or nurse practitioners looking after you.