

# What is an Emergency Laparotomy?

Author: Dr Caroline Busby, Mr V Chitre

© June 2015  
James Paget University Hospitals NHS  
Foundation Trust  
Review Date: June 2018  
NU 62 version 1

## Aim of information

An emergency laparotomy is a major operation that involves opening the abdomen (tummy). This allows the surgeon to view the organs inside and repair any emergency problems that have occurred. It is called “emergency” because it must be done very soon or even immediately and cannot wait until a later date.

## Why is the operation necessary?

An emergency laparotomy is commonly performed for infections due to perforated or inflamed bowel, a blockage to the bowel or internal bleeding. There are several other conditions that can also require emergency laparotomy, such as perforations or infections in the gall bladder or appendix, and abdominal injuries due to trauma. In most of these cases, there is no effective alternative to an emergency laparotomy. When there are alternatives, your surgeon will discuss these with you when seeking your consent for the operation. Your anaesthetist will discuss the implications of having a general anaesthetic and, if there are any alternatives, in your case.

## What will happen during the operation?

After the anaesthetist puts you to sleep and ensures that you will not feel pain, the surgeon makes a large cut in the front of your tummy, to open the abdomen.

It is sometimes necessary to remove a length of bowel. The cut ends of the remaining bowel can often be joined up at the same time; the join is called an anastomosis. However, sometimes it is unsafe to join the two ends of bowel immediately; the risk of leakage is increased if there is a lot of pus or infection. In that case, the surgeon will bring the end of the bowel to the surface. This is called a stoma. A stoma can be temporary (i.e. the bowel ends can be joined up again at another operation in future) but in some situations it may be permanent. If a stoma becomes necessary, specialised stoma nurses will help you learn how to manage it after the operation. With modern appliances, patients with stomas can lead an entirely normal life even if the stoma is permanent. Sometimes organs other than the bowel need to be removed, such as the gall bladder, spleen, or an ovary.

## What will happen after the operation?

Immediately after the operation, you may return to the ward, or go to the High Dependency Unit/Intensive Care Unit. You will be monitored closely, and receive adequate pain-killers, along with other vital medications. You will have various tubes and lines attached – one or more infusion line for delivering fluids and antibiotics into your circulation, a urinary catheter to drain and measure your urine, and lines that help monitor your blood pressure, pulse and oxygen levels. You may also have a drain (a plastic tube that comes out of your tummy via a small cut in the skin, and helps any fluid to escape) and a nasogastric tube (a plastic tube that is inserted into your stomach via your nose to drain fluid from the stomach).

Over the next few days, we will help you to recover by gradually getting you to drink and then eat, keeping your pain under control and encouraging you to move out of bed. The various tubes will be removed when they are no longer required. Physiotherapists will teach you breathing exercises to reduce the risk of chest infections and leg exercises to reduce the risk of blood clots (thrombosis). You will either control the amount of pain-killer you receive (patient-controlled analgesia) or receive

pain killers via a tube in the back (epidural analgesia). To reduce the risk of deep vein thrombosis (blood-clots), you will wear elastic stockings and receive an injection under the skin every day whilst you are in hospital.

## What are the risks?

All operations carry risks. Potential complications include:

- **Wound infection:** These are fairly common after emergency laparotomy. According to the Health Protection Agency, they affect 9 out of 100 patients after bowel surgery. They are usually mild and only need some of the skin staples to be removed early along with a short course of antibiotics. However, they can sometimes be severe and result in an open wound.
- **Bleeding:** Can occur during the operation or soon after. Very occasionally, a further operation may be needed to control the bleeding.
- **Abdominal abscess:** Sometimes a collection of fluid inside the abdomen becomes infected and forms an abscess. Radiologists can usually drain this by placing a tube into the abdomen via a needle in the skin.
- **Ileus:** The bowels may 'go to sleep' after the operation, causing them to become inactive and distended. A nasogastric tube inserted via the nose into the stomach usually helps this to resolve over a few days.
- **Anastomotic leak:** When a length of bowel is removed and the two cut ends joined together, the join ('anastomosis') can occasionally leak. This may require immediate re-operation and the ends of bowel may have to be brought out as a stoma.
- **Injury to internal organs:** Though uncommon, injuries to structures such as bowel, urinary bladder or ureter can inadvertently occur. If unrecognised at the time, a second operation may become necessary.
- **General Anaesthetic:** Risks include lung complications (such as chest infections) and cardiac complications (such as heart attack). For some patients these risks will be low but for others the risks may be very high, particularly in the elderly, obese and patients who smoke or have diabetes or heart disease.
- **Deep Vein Thrombosis (DVT) and Pulmonary Embolus (PE):** Blood clots can form in the deep veins of the legs. If a clot breaks off and travels to the lungs, it causes a life-threatening complication called pulmonary embolus. Blood clots can sometimes occur despite measures to prevent them, such as the elastic stockings and injections to thin the blood.
- **Wound failure:** If a severe infection occurs (and sometimes without an infection), the wound can fail to heal properly. If the wound opens up suddenly, it will need to be immediately repaired. More commonly, wound failure produces an incisional hernia months or years later.
- **Adhesions:** Bands of scar tissue may form between loops of bowel. The bowel can subsequently twist around these bands and become blocked; this could need further emergency surgery in future.
- **Death:** Though the complications described above can be dealt with in most cases, they do have the potential to cause death.



If you need an interpreter or a person to sign, please let us know.

**If you require a large print version,  
contact PALS on 01493 453240**