

Laparotomy

A laparotomy is a surgical incision (cut) into the abdominal cavity. This operation is performed to examine the abdominal organs and aid diagnosis of any problems, including abdominal pain. In many cases, the problem – once identified – can be fixed during the laparotomy. In other cases, a second operation is required. Another name for laparotomy is abdominal exploration.

Surgical investigation of abdominal pain

A common reason for a laparotomy is to investigate abdominal pain, but the procedure may be required for a broad range of indications. The abdominal organs include the digestive tract (such as the stomach, liver and intestines) and the organs of excretion (such as the kidneys and bladder). Your surgeon may need to operate to find out the exact cause of your complaint. For example, they may need to pinpoint the cause of internal bleeding in the digestive tract or find out where your bowel may be perforated (burst), before treatment can commence.

Medical issues to consider

Before your operation, your doctor or surgeon will:

- Ask about your medical and surgical history and any lifestyle factors (such as current medications, or history of smoking) that may affect your operation
- Explain the operation and discuss with you the possibility of further surgery once the diagnosis is made
- Inform you about any procedures leading up to the operation (pre-operative) and what to expect following the operation. You will be asked to consent to the operation
- Conduct tests like x-rays and blood tests.

Immediately before the operation

Before the operation, you can expect:

- You will be shaved in the abdominal area.
- You may be given a surgical scrub lotion to use in the shower and a theatre gown to wear.
- You may be given an enema or some other form of bowel preparation to help empty your bowels.
- An anaesthetist will check that you are fit for the operation and take note of any allergies you may have.
- You will have 'nil by mouth' (nothing to eat) for a number of hours beforehand.

Laparotomy procedure

A laparotomy is performed under general anaesthesia. The surgeon makes a single cut through the skin and muscle of the abdomen, so that the underlying organs can be clearly viewed. The exposed organs are then carefully examined. Once diagnosed, the problem may be fixed on the spot (for example, a perforated bowel may be repaired). In other cases, a second operation may be needed. Once the laparotomy is complete, the muscle of the abdominal wall and the overlying skin are sutured (sewn) closed.

Immediately after the operation

After the operation, you can expect:

- Your temperature, pulse, respiration, blood pressure and wound site are carefully monitored.
- You may have a drain inserted at the wound site.
- A small tube may have been passed through your nose and into your stomach to help drain stomach secretions for a day or two. This rests your digestive tract as it heals.
- A urinary catheter may be inserted to drain off urine.
- You are given intravenous fluids (directly into the vein), as you may not be allowed to eat for a few days.
- Pain relief should be given regularly, as ordered by your doctor, to keep you comfortable.
- As soon as possible, you are encouraged to do your deep breathing and leg exercises.
- You are assisted out of bed the day after the operation (all going well). Early walking is important, as it reduces the risks of blood clots and chest infections.
- You are given daily wound care and observation, along with advice on caring for your wound at home.
- Medication is given to you on discharge.

Possible complications

Possible complications of laparotomy include:

- Haemorrhage (bleeding)
- Infection
- Damage to internal organs
- Formation of internal scar tissue (adhesions)
- Bowel blockages or abdominal pain, which may be caused by adhesions.

Taking care of yourself at home

Be guided by your doctor, but general suggestions include:

- Try to rest as much as possible for two weeks.
- Arrangements should be made for relatives or friends to help you around the house. You need to strictly avoid any heavy lifting, pulling or pushing.
- You may need a modified diet following discharge from hospital. Follow all dietary suggestions.
- Make sure you take your medications and follow instructions precisely.
- Continue with any exercises you were shown in hospital.
- Report to your doctor immediately if your wound becomes inflamed, tender or starts to discharge. These symptoms could indicate infection.

Long-term outlook

Recuperation time following laparotomy is usually six weeks, but may vary depending on whether other procedures are performed at the same time. As with any post-operative recovery, it is important to always consult your doctor. Make sure you have a final check-up.

Other forms of diagnosis

An alternative to laparotomy is laparoscopy, or 'keyhole surgery'. Laparoscopy examines the inside of the abdominal or pelvic cavity using a slender tube (laparoscope) inserted through a small incision (cut). The laparoscope contains fibre-optic camera heads or surgical heads (or both). Before laparoscopy was available, doctors always had to make large openings and cut through layers of tissue in order to examine internal organs. Laparoscopy greatly reduces the patient's recovery time, but is not appropriate in all cases.

Where to get help

- Your doctor
- Surgeon

Things to remember

- A laparotomy is a surgical incision into the abdominal cavity.
- A laparotomy is performed to examine the abdominal organs and aid diagnosis of any problems.
- Possible complications include infection and the formation of scar tissue within the abdominal cavity.
- An alternative to laparotomy is laparoscopy ('keyhole surgery'), where small incisions are made through which to explore the abdominal cavity. Recovery time is greatly reduced with this method.

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