

Laparoscopy

Definition

A surgical procedure in which a fibre-optic instrument is inserted through the abdominal wall to view the organs in the abdomen and pelvic or to perform an operation. The term originated the mid 19th century term from Greek "lapara" (flank), plus -scopy.

Reasons for a laparoscopy

Since its origins in the early 20th century, laparoscopic surgery is now at a stage where there are very few abdominal and pelvic operations that cannot be carried out laparoscopically. Laparoscopy is commonly used to investigate causes of pelvic /abdominal pain, difficulty conceiving, to test for blockages in the fallopian tubes, to clarify pathology suggested by an ultrasound or x-ray imaging. laparoscopy is frequently combined with hysteroscopy and curettage and cystoscopy (see website documents).

Anaesthetic

Laparoscopy always requires a general (sleeping) anaesthetic.

Preparation

You should get a good night's sleep and take all your routine medications. No food for at least six hours, no water for two hours. If you are unsure of when to fast from please contact my staff. It is important that you provide me with a comprehensive list of all your medications including herbal remedies and alternative remedies. Herbal remedies, aspirin and fish oil tablets can prolong post-operative bleeding in an unpredictable way and should all be brought to my attention. It is important that you stop aspirin and tablets such as clopidogrel (Plavix) for at least ten days prior to the operation. If you have any concerns regarding the applicability of this to your individual circumstances, then please ask me or your physician. Often special arrangements need to be made for patients taking Warfarin.

Sometimes bowel preparation is needed (Fleet or Pico prep) to remove the residue from the bowel prior to the operation. This can make the operation safer if there is a need for bowel surgery.

Please shower carefully prior to the procedure and pay special attention to the umbilicus (belly button), removing all traces of fluff and debris. You might like to use an antibacterial soap (such as Gamophen) for this purpose. *Take out any belly button jewelry if possible.*

Duration of Procedure

A simple diagnostic laparoscopy, that is, a fact-finding procedure, might take as little as fifteen minutes although some laparoscopies may take as much as six hours. I will generally be able to give you a close idea of how long the operation will take.

What Happens in Hospital

You will be seen by the anaesthetist prior to commencing the operation who will ask you about your general health and about any previous anaesthetic experiences. In theatre an intravenous line will be placed, usually in the back of one hand or at the level of the elbow. Whilst you are asleep the skin of the vagina and abdomen are treated with antiseptic solution and a small incision is made, under the umbilicus, through which the laparoscope is inserted.

The abdomen is inflated with carbon dioxide gas, as in its normal state there is no space in which to see. A small amount of carbon dioxide gas is absorbed into your blood but this is rapidly breathed out. Other small incisions, most commonly around three, are made in the lower part of your abdomen. These incisions are not symmetrical. It is usual, if you have not had a hysterectomy, to perform a dilatation and curettage (D&C) and/or hysteroscopy and/or cystoscopy at the same time as a laparoscopy. The bladder will also be emptied at the beginning of the operation and some patients require a catheter (small tube) to drain the bladder for a while afterwards.

Incisions are closed with stitches or skin adhesive. Local anaesthetic is left inside the abdomen and in the wounds.

Post-Procedure Care

After leaving the operating theatre you will have a drip in your arm. This is to maintain your hydration as you will have been fasting prior to the procedure. You may also have a urinary catheter. After one to two hours you can eat or drink if appropriate, be able to change back into your street clothes. Arrangements will be made for your discharge. Most laparoscopies are performed as day surgery but sometimes we will admit you if you are not comfortable enough to go home or need longer observation.

Post Discharge Care

Most patients should be able to resume regular activities including driving within two to three days. There may be a dull non-specific pain across most of the abdomen due to stretching by the carbon dioxide gas. The patient's reaction to this is extremely variable. Some patients may feel subjectively bloated for a period of weeks after a laparoscopy, or some patients feel nothing. The discomfort can be treated with non-steroidal anti-inflammatory medications such as Naprogesic or Nurofen in combination with Panadol, Panadeine or Panadeine Forte.

You will probably have a small amount of vaginal bleeding due to the curette done at the start of the procedure. The next period usually occurs within four to six weeks and may not be the same as a regular period. Excessive bleeding, either from the vagina or from the wounds is very uncommon, although I am unable to give you an exact figure as to how long the bleeding will persist. You should notify me if you develop a fever (temperature greater than 37.5 degrees), pain or cramping that does not respond to regular doses of simple analgesics, bleeding involving clots or foul smelling vaginal discharge. You will usually have from one or two stitches in each laparoscopy incision and these stitches will need to be removed around a week after your procedure.

COMPLICAITONS

Complications Specific to Laparoscopy

Laparoscopies are very common and the complication rates in my hands are very low. However, the following complications have been described after laparoscopy:

1. Infection

Infection is rare. Infection of the wounds may not be apparent until days or weeks afterwards. This generally arises from the patient's own bacteria. The chance of a skin infection after a laparoscopy is around 2%.

2. Damage to organs such as bowel, bladder or blood vessels (around 1/3000)

These sorts of problems are very unlikely. Most such problems are correctable during the surgery, using laparoscopic techniques, however very rarely if an operation can't be completed this way, a larger incision (laparotomy) is made if it is in your interests to do so. This will naturally mean several days in hospital rather than a day stay. More likely in cases with advanced endometriosis or adhesions. Some problems are not apparent for days to weeks after surgery.

3. Failure to complete the procedure

Sometimes if unexpected findings require a major deviation from the procedure that I have not explained to you before, then I will simply end the operation to discuss my findings with you. A further or different kind of operation may need to be scheduled.

4. Scarring

Some people are prone to developing lumpy scars. More common in those of Asian or African background. You can reduce this by placing Steri Strips or Micropore medical tape over the wounds for a few weeks after the sutures are removed.

5. Urinary retention

A temporary problem where the patient cannot pass water in the immediate recovery period. We will make sure you can void after the operation. Sometimes a catheter is needed.

Results from Examination

Pathology results take several days. A post-operative visit will be scheduled. At this stage I will remove your sutures if used and we will have a discussion regarding pathology and findings of the operation.

Other reading

Hysteroscopy and Curette, Pain relief after Surgery, Cystoscopy, Wound healing.

Pager number for urgent post-surgical matters, 9387-1000.