

Laparoscopy

Laparoscopy, commonly called 'keyhole surgery,' is a minimally invasive procedure in which a surgical telescope attached to a video camera is passed through a small cut ('keyhole') in the abdomen, usually in the umbilicus (belly button).

Carbon dioxide gas is used to gently inflate your abdomen during laparoscopy. This is to enable your gynaecology doctor(s) to see inside your abdomen and to operate on the organs of the pelvis

and abdomen. Instruments can be passed through one or more other small cuts in the wall of the abdomen. The cuts are 5-10mm long. Laparoscopic surgery means that the gynaecology doctor(s) can perform operations without the need for a large cut, which has several important advantages, including a faster recovery, less pain, and smaller scars.

Why might I need a laparoscopy?

To look for or diagnose a condition:

Laparoscopy allows the gynaecology doctor(s) to determine whether any disease is present. Examples of conditions for which a laparoscopy may help with assessment or diagnosis are:

- Endometriosis
- Ovarian cysts
- Pelvic inflammatory disease (PID)
- Adhesions present after a past infection, surgery or endometriosis
- Persistent pelvic pain
- Infertility

To perform a treatment or procedure:

Laparoscopy can also be used to remove tissue or pelvic organs that may be contributing to a condition, such as those listed above.

By using a laparoscope to view the pelvis, instruments can be passed through the 'keyholes' in the abdomen, and the gynaecologist can perform a variety of operations, including:

- Hysterectomy
- Removal of the fallopian tubes and/or ovaries
- Removal of fibroids, cysts or other tumours in the pelvis
- Treatment of scar tissue
- Removal or ablation (burning) of endometriosis
- Treatment of prolapse
- Permanent contraception (tubal ligation)

What does a laparoscopy involve?

Anaesthetic

A laparoscopy is performed under general anaesthetic, which means you will be asleep throughout the procedure and will not feel anything. An anaesthetist (the doctor who is responsible for your anaesthetic) or staff from your hospital's pre-admission clinic may wish to speak with you or examine you before the procedure. Every patient is different, and the anaesthetist will tailor the plan for your anaesthetic as required, to suit your needs.

The Australian and New Zealand College of Anaesthetists has information on its website (see useful resources below) about the different types of anaesthesia, how to prepare for an anaesthetic, and what to expect afterwards. You may be asked to fast (to not drink or eat) before surgery and, in some cases additional measures such as bowel preparation (use of medicines to empty the bowel before surgery) will be recommended.

It is important to ask your gynaecology doctor(s) and anaesthetist(s) whether any of your medications need to be stopped before your surgery.

Positioning for a laparoscopy

Often a patient is placed in the lithotomy position, which means you are lying on your back with your legs bent up and supported in stirrups. This allows the doctor(s) to access the vagina and cervix, to place instruments through the vagina and into the uterus so the uterus can be moved or positioned during the operation, or to perform a cystoscopy (procedure used to look inside the bladder using a telescope). You will usually be positioned for your surgery once you are under anaesthesia. Positioning is performed carefully to limit the risk of nerve problems in the arms or legs.

What are the potential risks of a laparoscopy?

Laparoscopy is a common and generally safe procedure. However, all operations have potential risks. The severity and likelihood of these risks vary depending on individual factors. It is important to discuss these risks and how they apply to you.

Potential complications that may occur with laparoscopy include.

- Bleeding- Most surgical procedures result in a small amount of bleeding.
 In some cases, bleeding can be heavier than expected. If heavier bleeding occurs, it is most commonly during the operation and may mean the surgery takes longer or a different surgical approach is needed. Sometimes bleeding can occur after the surgery is completed. This usually resolves without treatment, but it can slow your recovery and, in some cases, may require drainage.
- Infection- This may include a bladder infection, if a urinary catheter is used for your surgery. You can also develop a wound infection. Antibiotics are usually given during the operation to help reduce the risk of infection.
- Blood clots in your legs or lungs- Thrombosis is the formation of a clot in
 a blood vessel, usually in the legs. In rare circumstances, part of the clot
 can break off and travel to the lungs. This can be life threatening. The risk
 is increased by factors such as the duration of the surgery, or if you are
 overweight or smoke. The risk can be minimised by using compression
 stockings, early movement after surgery (e.g. standing up and walking) and
 injections of a blood-thinning medicine after surgery, if required.
- Injury to other internal organs such as your bladder, bowel, nearby blood vessels, or the ureter(s) (tubes that drain the kidneys)- Whenever surgery is performed on the organs of the pelvis, there is a small possibility of damage to these organs. This risk depends on the complexity of the operation, and whether scarring is present.
- Carbon dioxide gas becoming trapped in the skin or body wall. There is also a rare complication where carbon dioxide gas enters a blood vessel.
- A hernia at one of the incision sites- Rarely, abdominal incisions may weaken, allowing the organs of the abdomen to bulge through.
- Nerve injuries- Nerves in the skin or in the abdomen and pelvis can be injured during surgery resulting in pain, altered sensation, and rarely, problems with bladder and bowel sensation.
- Having to convert to an open procedure (making a larger cut on your abdomen) either due to difficulties or complications of the surgery.

Recovery after a laparoscopy

When you wake from the anaesthetic, it is normal to feel disoriented and sleepy. Some patients will experience nausea or vomiting, but these feelings should pass quite quickly.

There might be some pain where the gynaecology doctor(s) made the cuts in your abdomen, and you will be given medicines for this pain. The carbon dioxide gas used during laparoscopy may sometimes cause a sensation of fullness in the abdomen and pain in the shoulder.

Depending on the complexity of the surgery and duration of the operation, it is likely you will feel tired and have abdominal discomfort for a few days. There may also be some vaginal bleeding, particularly if there has been a hysteroscopy (when a thin telescope is used to examine inside the uterus) or curettage procedure (when the tissue lining the inside of the uterus is scraped away) performed at the same time. This will usually settle down over a few days.

The small cut(s) in your abdomen will be closed by stitches or skin glue and covered by dressings. Some stitches dissolve by themselves, some will need to be removed. Ensure your nurse(s) or doctor(s) talk to you about the plan for the stitches used to close the incisions, and how to care for the dressings over the wounds.

It is important to move around after a laparoscopy, and to have adequate rest if tired. Walking or moving every day and trying to increase the amount of exercise you do will be beneficial to your recovery. It is also important to avoid dehydration, so drinking enough fluid is advisable. It is important to try and avoid becoming constipated as this can slow down your recovery; use over the counter laxatives as needed.

Depending on the type of work you do, after surgery you may be recommended to take up to two weeks away from work and may need to arrange for help with caregiving responsibilities during this time. This can be discussed with your doctor(s)/ team.

When to get medical advice

It is important to notify your gynaecology doctor(s) or the hospital if you have:

- Pain that is not improving or worsening
- Problems passing urine.
- Bleeding that is ongoing or increasing.
- A fever (higher than normal body temperature).
- You feel that you are not recovering as quickly as expected based on the discussion you had with your doctor(s) prior to the surgery.

Preparing for surgery checklist

If you and your gynaecology doctor(s)/ team think a laparoscopy is likely to benefit you, the process may involve:

- You doctor(s) gaining your informed consent to have the procedure performed.
- Carrying out/ attending any tests in preparation for the surgery (e.g. blood tests and radiology/ imaging tests), if required.
- A discussion with your doctor(s) about your pre-surgery health, including any
 medications you take (including herbal or vitamin supplements), or whether
 you smoke or vape.
- Making the necessary arrangements for your surgery with the hospital or day procedure unit. Ensure you have discussed any pre-surgery requirements (e.g. fasting, medicines, etc.).

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Planning for your recovery. Ensure you have discussed with your doctor(s)
what your recovery may look like, including if you will be recommended
to take leave from work, arrange for help with caregiving responsibilities, or
avoid certain activities.

Useful resources

ANZCA | Patient information (Anaesthetic information) https://www.anzca.edu.au/patient-information

Informed consent

If you are undergoing any kind of healthcare treatment, procedure, or other intervention, you have the right to make an informed choice about your care. Informed consent is your permission, given voluntarily, to proceed with treatment.

It is your doctor's responsibility to ensure informed consent is properly obtained meaning:

- You have had the opportunity to discuss all management options with your doctor(s)/ team.
- You have had the opportunity to review written information.
- You have understood what is involved with the treatment/ procedure, in advance of it.
- You have had the opportunity to see your doctor(s)/ team more than once
 or been given the option and time to consult another doctor, if you require
 another opinion.

When preparing for any kind of healthcare treatment, procedure, or other intervention, it is important that you discuss all details about your care. Questions you can ask may include:

- Specific cultural or personal considerations that are important to you, so that these can be included in your care where possible.
- Reasons for your doctor recommending a particular treatment/ procedure and alternative options.
- What you can expect on the day of a treatment/ procedure, including who
 will be involved, how you will be positioned, and equipment/ instruments
 that will be used.
- What to expect after a treatment/ procedure, including anticipated time in hospital and expectations for your recovery.
- Expected immediate and long-term outcomes and risks.
- Whether there are permanent or irreversible consequences of the procedure.

Notes	

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Notes	
RANZCOG currently uses the term 'woman' in its documents to include all	
individuals needing obstetric and gynaecological healthcare, regardless of their	
gender identity. The College is firmly committed to inclusion of all individuals	
needing O&G care, as well as all its members providing care, regardless of their gender identity.	

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