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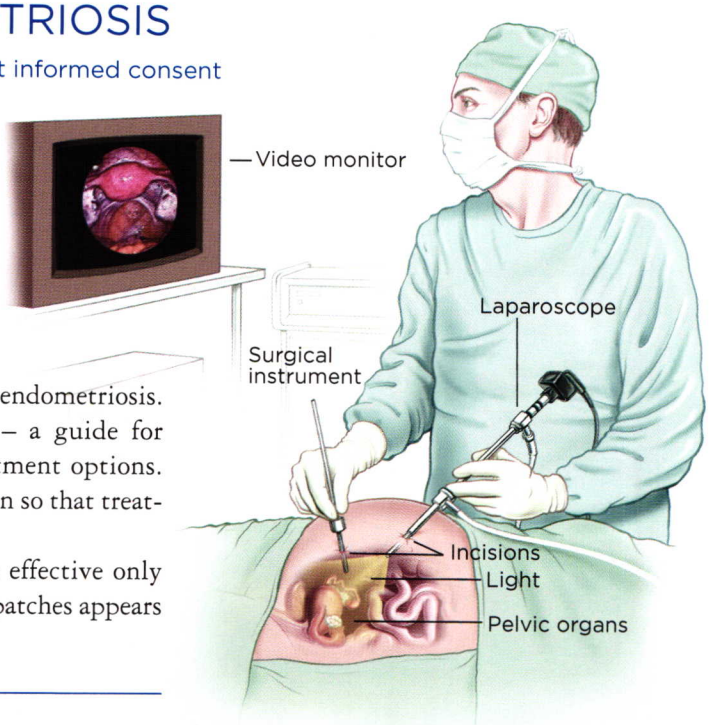
AURORA WOMEN'S HEALTH

THE LAPAROSCOPIC TREATMENT OF ENDOMETRIOSIS

Patient information to assist informed consent

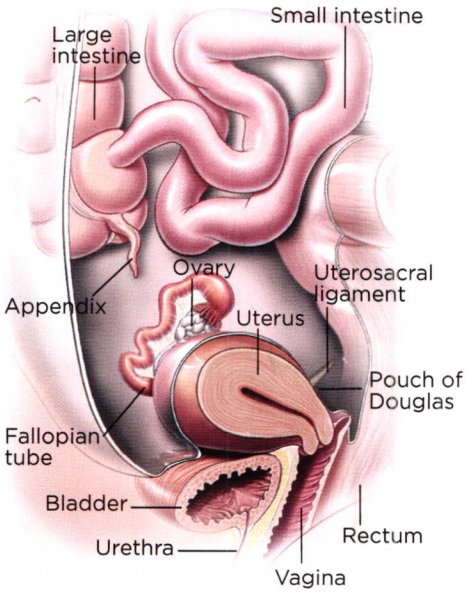


Endometriosis is a condition where tissue similar to the endometrium (that lines the inside of the uterus) also grows outside the uterus. The most common place to find growths or "patches" of endometriosis is on the ovaries, fallopian tubes, uterus, large intestine, appendix, bladder, uterosacral ligaments, pouch of Douglas and peritoneum (the fine membrane that covers the pelvic organs). See the illustration, below.

Symptoms and the extent of patches differ in every woman with endometriosis. The patient education pamphlet "Understanding Endometriosis – a guide for women" provides information on types, causes, diagnosis and treatment options. After diagnosis, the gynaecologist usually outlines a management plan so that treatment options will meet the individual needs of the woman.

Hormone tablets may be helpful in relieving symptoms but are effective only while a woman continues to take the tablets. The surgical removal of patches appears to be more likely to provide longer-term relief from symptoms.

NORMAL ANATOMY



Principles of surgical treatment

Surgical treatment may be able to delay or stop the progress of the condition. The objectives of surgery are:

- to diagnose whether endometriosis is present, and
- to remove or destroy patches as much as possible from the pelvic organs.

Surgery may be recommended to:

- treat pain and discomfort that have not been adequately controlled with medical therapy
- improve fertility, which can be diminished by endometriosis
- remove other areas of endometriosis and preserve fertility as much as possible. The extent of surgical treatment depends on the severity of the condition, the woman's age, her plans for pregnancy, and other health issues
- remove an endometrioma (chocolate cyst) from an ovary.

Laparoscopy is usually preferred to an open operation through a larger incision (laparotomy) because:

- laparoscopy reduces the risk of adhesions (scar tissue on pelvic organs) that can cause pain and may contribute to infertility
- the laparoscope provides excellent close-up views of patches (if present)
- incisions are smaller and less painful during healing, with a better cosmetic result
- recovery time is faster.

If no patches are found during laparoscopy, or if removal of patches is a minor procedure, the laparoscopy may be done as a day procedure. However, a patient may have to stay in hospital longer if more extensive removal of patches is needed; the procedure may be performed in two stages.

IMPORTANT: FILL IN ALL DETAILS ON THE STICKER BELOW

DEAR DOCTOR: When you discuss this pamphlet with your patient, remove this sticker and put it on the patient's medical history or card. This will remind you and the patient that this pamphlet has been provided. Some doctors ask their patients to sign the sticker to confirm receipt of the pamphlet.

Your Doctor

This patient education has been reviewed by obstetricians and gynaecologists in Australia and New Zealand

Edition number: 5

Talk to your Doctor

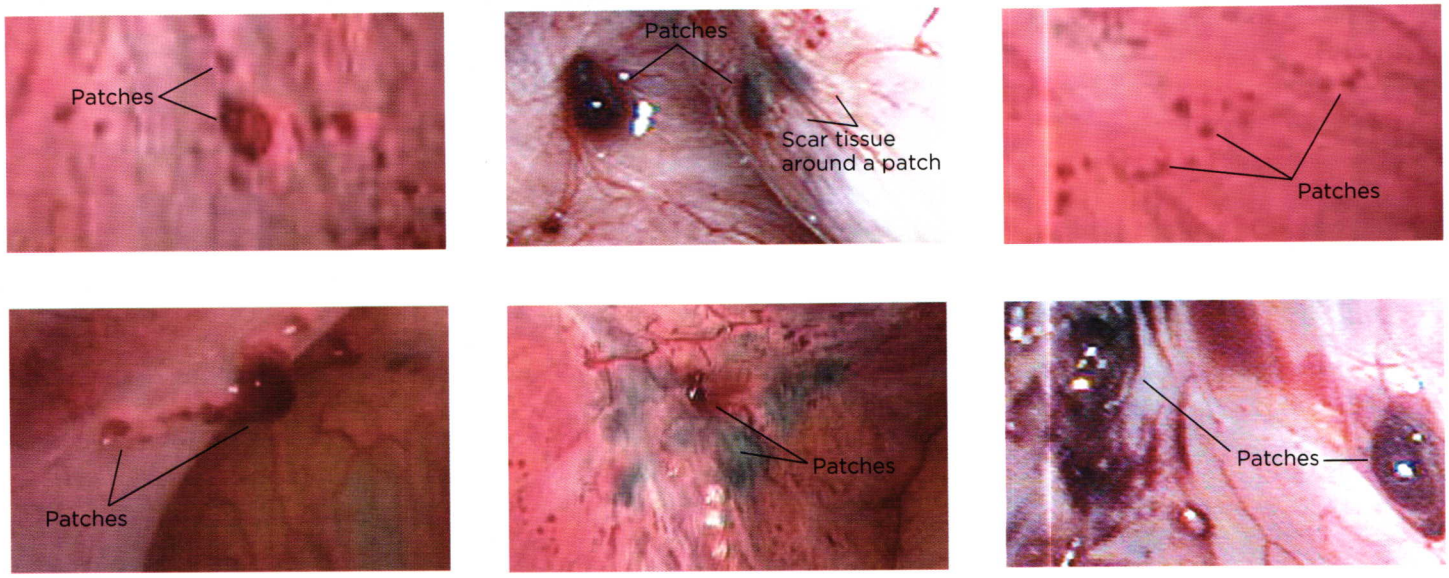
This pamphlet is intended to provide you with general information. It is not a substitute for advice from your doctor and does not contain all the known facts about laparoscopic treatment of endometriosis. If you are not sure about words or terms used in this pamphlet, or other issues relating to endometriosis and your health, ask your doctor. Read this pamphlet carefully, and save it for reference. Technical terms are used that may require further explanation by your doctor.

Write down questions you want to ask. Your doctor will be pleased to answer them. You may want to get the opinion of another doctor if you feel uncertain about the advice you are given. Use this pamphlet only in consultation with your doctor.

Making a decision: The decision whether to have surgery is always yours and should not be made in a rush. Make a decision only when you are satisfied with the information you have received and believe you have been well informed.

Consent form: If you decide to have treatment, your surgeon will ask you to sign a consent form. Read it carefully. If you have any questions, ask your surgeon.

Outcome: Discuss with your doctor the likely outcome. Laparoscopic removal of patches, either by excision or ablation or both, is a proven and effective procedure for relieving pain. However, the surgeon cannot guarantee that your surgery will be successful, that you will not need further surgery, and that the surgery has no risks. Even after successful treatment, symptoms and lesions may recur. As every case is different, the possibility of recurrence can vary widely from woman to woman.



Taken during laparoscopy, these photographs of patches show that their appearance can vary widely.

Diagnosis of endometriosis

Symptoms that suggest endometriosis may be present include:

- period pain
- deep pain during intercourse
- unexplained chronic pelvic pain
- difficulty becoming pregnant.

Laparoscopy provides the only reliable diagnosis for endometriosis. It also shows the extent of the condition.

Laparoscopic diagnosis allows endometriosis to be "scored" as:

- Stage 1 - minimal disease
- Stage 2 - mild
- Stage 3 - moderate
- Stage 4 - severe.

However, the appearance of lesions on laparoscopy may not necessarily correlate with the severity of the woman's symptoms. Laparoscopic diagnosis and subsequent surgery are pivotal in the treatment of endometriosis and are likely to remain pivotal. In some cases, ultrasound may be used to assist diagnosis.

Your medical history

Your gynaecologist needs to know your complete medical history. Tell your gynaecologist about any health problems you may have had because some problems may interfere with surgery, anaesthesia or recovery. Tell your gynaecologist if you have or have had:

- an allergy or bad reaction to antibiotics, anaesthetic drugs, or any other medicines
- prolonged bleeding or easy bruising when injured
- recent or long-term illness, and any previous surgery.

Give your gynaecologist a list of ALL medicines you are taking or have recently taken. Include prescription medicines, "over the counter" medicines, and natural therapies. Include long-term treatments such as blood thinners, warfarin, aspirin (including that contained in cough syrups), arthritis medication or insulin. Your gynaecologist may ask you to stop taking some medications for a week or more before your procedure, or you may be given an alternative dose. Discuss this carefully with your gynaecologist.

If you are taking the contraceptive pill, you may or may not be advised to stop taking it for one month before the surgery. If you do stop the Pill, other reliable contraception is needed.

Smoking: Smoking impairs healing and increases the risks associated with surgery and general anaesthesia. Smoking is also a risk factor for other serious diseases. It is best to quit. At the least, stop in the weeks before and after the procedure.

Anaesthesia

Laparoscopy is usually performed under general anaesthesia. In some cases, either spinal or epidural anaesthesia may be recommended. Modern anaesthesia is safe and effective, but does have risks. Your anaesthetist can explain the anaesthetic procedure in greater detail.

Support groups

Endometriosis support groups exist in Australia and New Zealand. Endometriosis organisations can provide valuable support, services, forums and information on coping with the condition. Many groups have input from medical practitioners and other experienced healthcare professionals. Your doctor may be able to provide further information on helpful groups.

LAPAROSCOPIC PROCEDURES TO DIAGNOSE AND TREAT ENDOMETRIOSIS

Diagnostic laparoscopy

Diagnostic laparoscopy is undertaken solely for the purpose of diagnosis with no surgical treatment. A small piece of tissue of any suspected endometriosis patch can be removed (biopsied) for examination by a pathologist. This can confirm the diagnosis of endometriosis. A biopsy can be important because tissue that looks very much like a patch may not be one.

Operative laparoscopy

Operative laparoscopy is undertaken to surgically treat patches and endometriomas. It is often done at the same time as diagnostic laparoscopy, or soon after diagnosis, or as a two-stage procedure. Sometimes, operative laparoscopy can only be performed after an initial diagnostic laparoscopy to assess the severity of the condition. Before surgery, you may need a "bowel preparation" to empty the bowel. A catheter may be placed in the urethra to drain urine.

The procedure: First, a laparoscope is inserted through a small incision near the navel. The abdomen is gently inflated with carbon dioxide gas to raise the abdominal wall clear of the pelvic organs and improve the surgeon's view and access.

The pelvic organs can be gently moved using an instrument placed inside the uterus (via the vagina) and another instrument placed through an incision low in the abdomen. This improves the ability to inspect the pelvic organs and identify patches.

Other small incisions may be needed depending on the type and amount of surgery required. Your surgeon will try to remove as much endometriosis as possible. A variety of techniques may be used, including:

- excisional surgery (removal of patches using small cutting instruments)
- cautery (cutting and burning of tissue using an electrical probe)
- laser surgery, for excision or cautery.

The surgical techniques depend on your surgeon's preference, the location of the endometriosis, and the reasons for surgery. The procedures can remove patches, nodules and endometriomas, and can cut adhesions. As endometriosis may penetrate deeply into the pelvic organs, removal of patches can be difficult.

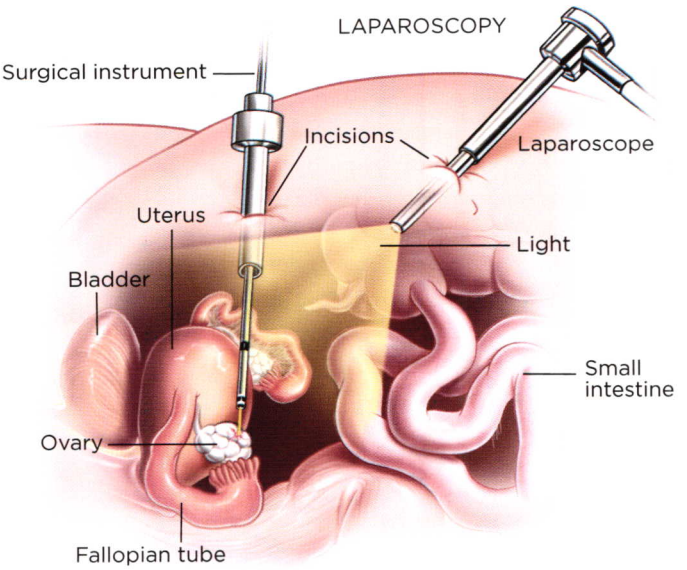
The procedure may take from 30 minutes to two or more hours to complete. Often, a second surgeon is present to assist.

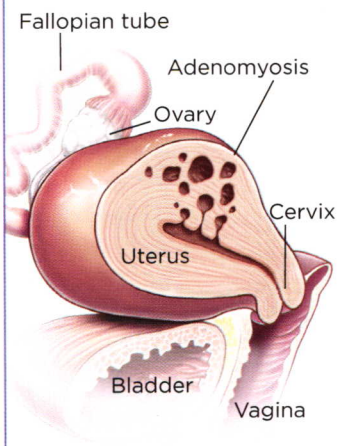
After the surgery is completed, the laparoscope is withdrawn, and the carbon dioxide gas is allowed to escape, as much as possible. Surgical incisions are closed with small stitches or sticking plaster.

Laparotomy

Occasionally, the surgeon may need to make a larger cut in the abdomen, called a laparotomy; a very small incision is called a mini-laparotomy. Laparotomy may be required in women who have had many operations in the past, or those with a vertical cut on their tummy. The decision to make a larger cut is made either to allow more complete removal of the endometriosis or for the patient's safety.

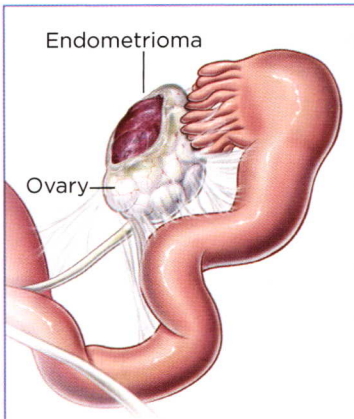
A woman may be disappointed that the laparoscopy has been converted to a laparotomy. However, this is done in the best interests of the woman's well-being and to improve the likelihood of successful treatment. A conversion from a laparoscopy to laparotomy should not be considered a complication of the procedure.





Adenomyosis

Endometriosis within the wall of the uterus is called adenomyosis. A troublesome non-cancerous tumour may be present (an adenomyoma). While an adenomyoma can sometimes be removed from the wall of the uterus during laparoscopy, the surgeon may need to make a slightly larger incision (a mini-laparotomy) to remove it.



Endometrioma

An endometrioma is an endometriosis cyst of an ovary and can occur on one or both ovaries. Of every 10 women with endometriosis, about two to four will have an endometrioma, with most of these cases being in moderate to severe stages. An endometrioma can be excised during laparoscopy. The aim is to disturb the normal ovary tissue as little as possible.

RESULTS OF LAPAROSCOPIC TREATMENT

- Improvement in pain: About eight women out of 10 with pelvic pain report a reduction in pain. The improvement is greater in women whose endometriosis was moderate to severe. About one or two women in 10 report a return of pain in the year after surgery, even though the operation to remove endometriosis was successful.
- Improvement in fertility: Improvement in fertility after surgery has been proven only in cases of minimal and mild endometriosis. However, many gynaecologists believe that, in their experience, the treatment of moderate or severe disease is also beneficial in improving fertility in select cases.

Recovery after laparoscopy

Depending on the extent of surgery, the woman is often able to go home on the same day. More extensive treatment may require an overnight or longer stay.

If you have had a general anaesthetic, do not drive for at least 24 hours, and do not make any important decisions for two days. Although a few women feel able to return to work the next day, most take a few days off work.

Shower and bathe as normal. Tampons may be used and should be changed regularly. Some symptoms may persist for several days, including:

- pain and discomfort at the site of the incisions and around the operated area
- muscle aches and pains, and tiredness
- mild nausea and painful cramps
- vaginal bleeding if an instrument was placed in the uterus
- a sensation of swelling in the abdomen
- pain in one or both shoulders that may extend into the neck. This may be due to the carbon dioxide gas used during the procedure. Pain may last for a few days. Lying down can often help to improve it.

Pain relief: Your gynaecologist will prescribe a painkiller. If you have persistent discomfort, tell your gynaecologist.

Resumption of activities: Normal physical and sexual activity can be resumed after bleeding and discomfort have stopped, and when you are feeling well.

Constipation: Constipation after abdominal surgery commonly occurs, especially if endometriosis was on the bowel and if codeine or pethidine is taken for pain relief. To assist a return to normal bowel habits, eat a light diet with plenty of fruit, have a high fluid intake, and do gentle exercise, such as walking. The addition of psyllium husks to cereal or a mild laxative containing psyllium (available from pharmacies) also helps.

Blue discharge: If the function of the fallopian tubes has been tested with a dye to check for infertility, vaginal discharge may have a blue tint.

THE POSSIBLE COMPLICATIONS OF LAPAROSCOPIC SURGERY

As with all surgical procedures, laparoscopy and laparotomy do have risks, despite the highest standards of practice. While your gynaecologist makes every attempt to minimise risks, complications may occur that have permanent effects.

It is not usual for a gynaecologist to outline every possible side effect or rare complication of a surgical procedure. However, it is important that you have enough information about possible complications to fully weigh up the benefits, risks and limitations of surgery.

The following possible complications are listed to inform and not to alarm you. There may be other complications that are not listed. Obesity, diabetes and other medical problems can cause greater risks of complications.

General risks of surgery

- Cardiovascular problems such as blood clots, stroke or heart attack, which often depend on the patient's medical history. Some surgeons use preventative measures during the surgery to avoid the risk of blood clots.
- Infection of a skin incision, the uterus, bladder, chest or bloodstream may require antibiotic treatment. Rarely, a pelvic abscess may occur.
- Excessive bleeding may require a blood transfusion.
- A keloid or hypertrophic scar (a surgical scar that becomes inflamed, raised and itchy) may form. Such a scar can be annoying but is not a threat to health.

Specific risks of laparoscopy

- As with any laparoscopic procedure, there is a small risk of making an unintended hole in a pelvic organ. Whether this causes a major problem depends on which organ is damaged, whether the damage is recognised at the time of surgery, and the type of procedure necessary to repair it. Organs affected could include the bladder, ureter, bowel, or large blood vessels. This type of injury occurs about once in every 1,000 procedures for diagnostic laparoscopy and five times per 1,000 procedures for operative laparoscopy. Patients who are very thin or obese, or have had previous surgery to the abdomen may be at an increased risk. (Sometimes it is necessary to make a hole in one of these organs in order to completely remove the endometriosis. This is a planned procedure and good surgery, rather than a complication.)
- Damage caused by a surgical instrument may require a laparotomy (open surgery) for repair. Surgical repair of any damaged organ is done at the time of the surgery. However, if organ damage during laparoscopy is not recognised, a laparotomy may be undertaken when the injury becomes apparent, usually within the next two weeks. In the event of serious damage, surgical repairs may be extensive. Rarely, a colostomy may need to be performed as a temporary measure before the bowel is repaired at a later date. The colostomy is rarely permanent.
- A bubble of carbon dioxide may get into the blood stream. Called a gas embolism, it can travel to the heart and lungs, and may become life threatening. Although rare, it has caused deaths. If signs of a gas embolism are obvious, it can be treated successfully.
- If an endometrioma is removed from an ovary, it may not function normally. Of every 10 endometrioma cases, about three patients develop ovarian adhesions that may contribute to ongoing infertility.
- Uncommonly, a hernia may develop from an incision of any size.
- Peritonitis, an infection of the inside of the abdomen, may occur due to a small hole or burn to the bowel. It may not be obvious for several days and can be life threatening. This requires further surgery.

Report to your Gynaecologist

Notify your gynaecologist at once if you notice any of the following:

- nausea or vomiting that is worsening
- persisting and increasing abdominal pain, and any pain not reduced by painkillers
- persistent bleeding from the vagina that is smelly or heavier than a normal period and is bright red
- persistent redness, pain, pus or swelling around the incisions, or a fever more than 38°C, or chills
- pain or burning on passing urine or the need to pass it frequently
- short of breath, feeling faint
- a sudden collapse for no apparent reason in the day or two after surgery
- any concern you may have about your surgery.

If you cannot contact your gynaecologist, go to your family doctor or Accident and Emergency Department at your nearest hospital.

COSTS OF TREATMENT

You should request advice about fees so that you are aware of any rebates and out-of-pocket expenses. It is best to discuss fees before treatment rather than afterwards.

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