The Endometriosis Network Canada

Surgery: A guide for people with endometriosis

Overview

The purpose of this resource is to help you understand the different types of surgery you may undergo as part of the treatment of your endometriosis. We will also discuss how to find the right surgeon, planning your endometriosis surgery, and what to expect in the months and years after surgery. Knowing this information will help you make choices about your surgery that will work best for you.

Surgery for endometriosis and related conditions

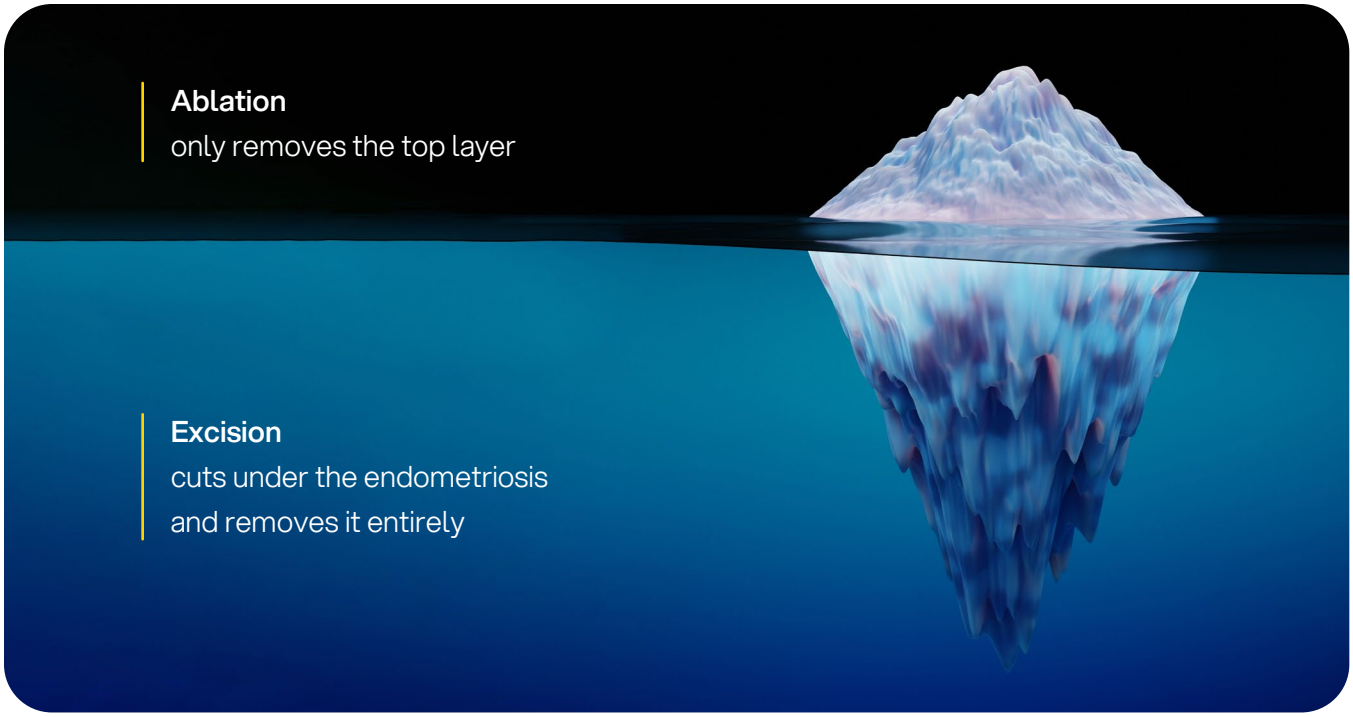
Endometriosis surgery

? What is laparoscopic surgery?

Many people with endometriosis have laparoscopic surgery as part of their treatment plan. In laparoscopic surgery, which is a type of minimally invasive surgery, the surgeon makes incisions — small cuts — in the abdomen. The surgeon uses the incisions to insert a tiny camera and surgical instruments into the pelvis. The camera works like a magnifying glass, so that the surgeon can see and operate on the endometriosis more easily. Laparoscopic surgery is preferred for endometriosis because it is less painful and has a faster recovery than a laparotomy, which involves making a large incision in the abdomen.

The goal of laparoscopic surgery for endometriosis is to remove endometriosis growths and remove scar tissue that can prevent your organs from functioning normally. The two most common techniques used in laparoscopic surgery for endometriosis are **1. excision**, which is cutting out an endometriosis growth, and **2. ablation**, which is burning off an endometriosis growth. Excision is the only technique that can completely remove deep endometriosis growths.

> Research shows that excision surgery for endometriosis is better at treating pain caused by endometriosis than ablation surgery. Excision surgery not only improves pain associated with endometriosis but also enhances the overall quality of life.



Ablation of endometriosis is not the same as **endometrial ablation**.

Endometrial ablation is a procedure that removes a part of the lining of the uterus. It is used to help with heavy menstrual bleeding, and is not recommended for people who may want to get pregnant.

Excision and ablation surgery for endometriosis are both generally considered safe. The chance of complications varies based on where the endometriosis is located in your body and the specific surgical techniques your surgeon uses. The risk is lowest when surgery is done by a skilled surgeon with experience operating on endometriosis.

What if you are trying to become pregnant?

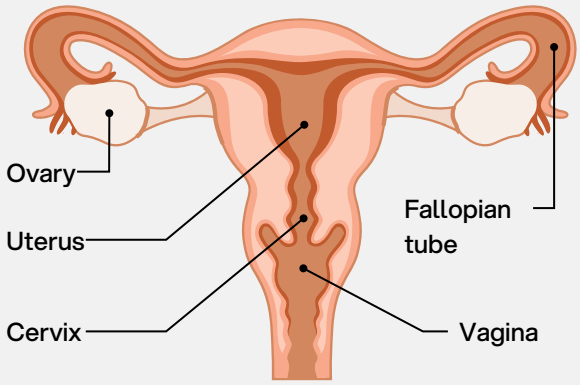
For people with endometriosis growing on their ovaries, it is not clear whether excision, ablation, or assistive reproductive technologies like in-vitro fertilization are best. This is probably because there are so many different factors affecting fertility. More research is needed to understand the role of surgery in treating infertility in people with endometriosis. Some research suggests that surgery can be helpful for fertility. But other research suggests that undergoing assisted reproductive technologies first, before surgery, is better. By considering your individual medical situation, experts skilled in endometriosis surgery will be able to help you make the best decision for you.

My surgeon said they were going to do a laser laparoscopy. Is this the same as excision surgery?

The laser is one type of surgical instrument. A laser is a specialized, intense light beam that can be used to perform excision surgery, or to perform ablation surgery. There are also other surgical tools that may be used for excision like scalpels (small, very sharp knives), electronic scalpels (instruments that cut using electrical energy), or surgical scissors. If you have questions about what is going to be done during your surgery, ask your surgeon to explain it to you. It's your right as a patient to ask questions and express any concerns you may have about your treatment. It's also important to discuss your goals and preferences for your surgery ahead of time with your surgeon. If you disagree with what your surgeon is proposing, you have the right to request a second opinion.

Hysterectomy

Your surgeon may offer you a surgical procedure removing your uterus as part of your surgical management. Surgical removal of the uterus is called a hysterectomy. This is typically done using a minimally invasive approach. You may hear terms such as vaginal hysterectomy, laparoscopic hysterectomy, and laparoscopic-assisted hysterectomy — these are all types of minimally invasive hysterectomy. After a hysterectomy, you will not get periods, and you will not be able to get pregnant and carry a baby.



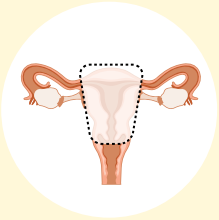
A hysterectomy does not treat endometriosis

The reason your surgeon may offer to do a hysterectomy is to treat conditions that affect your uterus. These conditions include adenomyosis and fibroids. Your surgeon may also recommend a hysterectomy at the same time as excision of endometriosis if they believe that some of your pain is generated by your uterus, or if the chance of leaving endometriosis behind is high if your uterus remains.

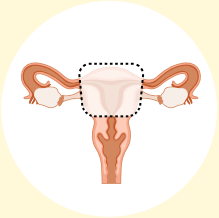
> If a person with endometriosis is planning to have a hysterectomy, the official recommendation, called a clinical practice guideline, is that the surgeon should do a full excision of endometriosis at the same time.

The guideline also recommends a total hysterectomy, which is the removal of both the uterus and cervix. Removing the cervix ensures that deep endometriosis near the cervix is completely excised. Research does not support any benefit to leaving the cervix behind.

DEFINITION

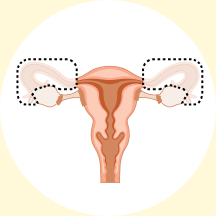


A **total hysterectomy** refers to removal of the uterus and cervix

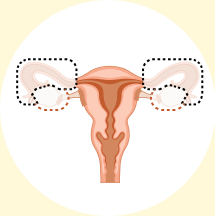


A **subtotal hysterectomy** refers to removal of the uterus only. This is also sometimes called a **supracervical hysterectomy**

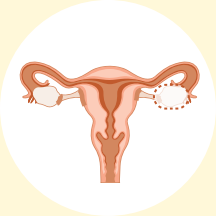
DEFINITION



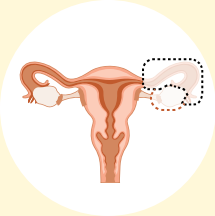
Salpingectomy means removal of the fallopian tube



Bilateral means removal of the both ovaries and/or fallopian tubes



Oophorectomy means removal of the ovary



Unilateral means removal of only one ovary and/or fallopian tube. For example, unilateral salpingo-oophorectomy means that the ovary and fallopian tube on one side of the body will be removed

Salpingectomy

Your surgeon may suggest removing your fallopian tubes during your hysterectomy. This recommendation is based on the fact that some types of ovarian cancer start in the fallopian tubes, so removing them is a way to reduce your future risk of ovarian cancer. Keeping your fallopian tubes does not benefit your health or fertility once your uterus is removed. If your fallopian tubes are removed but you still have your uterus, you can still get pregnant through assisted reproductive technologies like in vitro fertilization.

Oophorectomy

Sometimes endometriosis damages one or both ovaries. If the damage is severe, your surgeon may recommend removing the damaged ovary, which is called oophorectomy. If one ovary is removed, you may still be able to get pregnant without medical assistance. If both ovaries are removed, you will need to use assisted reproductive technologies — like freezing your eggs before having your ovaries removed or using donor eggs — to become pregnant.

Your uterus is about the size of a lemon, while your ovaries are the size of almonds! If you have a disease like adenomyosis or fibroids, your uterus may be bigger. And if you have endometriosis on your ovary, it may be bigger as well.

Removing both ovaries causes immediate menopause (called surgical menopause). Surgical menopause is associated with long term health risks, especially if you are under 45 years old. These risks include increased change of bone fractures, heart disease, difficulties with thinking and memory, mood issues, and sexual problems. If you have both ovaries removed, talk to your surgeon about whether taking medication to replace the hormones your ovaries make is a good option for you, and whether there are any other medications, supplements, or lifestyle changes you might need to consider.

Because of these risks in people under 45 years old, surgeons skilled in excising endometriosis on the ovaries will recommend removing the endometriosis but leaving at least one ovary or both ovaries behind.

How to find the right surgeon

Gynecologists need specialized training and expertise to do excision surgery for endometriosis. This training usually takes 2 years, and is called a fellowship in minimally invasive gynecologic surgery. Gynecologists who did not complete a fellowship in minimally invasive gynecologic surgery can do ablation surgery for endometriosis. To find Canadian gynecologists with fellowship training in minimally invasive gynecologic surgery, visit website.

When people have endometriosis on organs like the bowel, bladder, or lungs, the gynecologic surgeon usually works with other surgeons as part of a team. For example, if a person has endometriosis on the ovary and on the lung, a gynecologic surgeon and a thoracic surgeon perform the surgery together. If you have endometriosis on several organs, ask your gynecologic surgeon how they will work together with other specialists to remove your endometriosis.

Some people travel outside of their home province or territory to get excision surgery. If you travel within Canada for surgery, most of the costs should be paid by your provincial or territorial health insurance plan if you have a valid health card. If you travel outside of Canada for surgery, you will have to pay for your trip and the surgery.

Accessing excision surgery in Canada

Excision surgery specialists are not equally available across Canada. These surgeons tend to work at large hospitals in big cities. People with endometriosis who live in rural, remote, and northern communities usually have to travel to get excision surgery. Some provinces and territories do not have excision surgeons.

There is typically an extended waiting period to see excision surgery specialists and schedule surgeries. While you wait, your surgeon may suggest medications to manage your symptoms. You can also consider alternative and complementary approaches, which are explained in more detail on our website.

Planning your endometriosis surgery

Have a thorough discussion with your surgeon about your goals and preferences for surgery. For example, if you are concerned about your ability to get pregnant, your surgeon might suggest different surgical options than for someone who doesn't plan to get pregnant. Don't hesitate to ask as many questions as you need to fully understand what your surgeon is recommending and why.

Remember, you have the final say in what happens during your surgery. **Before the surgery, your surgeon is required to make sure that you understand and agree to the surgical plan, including all of the procedures that will be done, and their risks, benefits, and side effects. This process is called informed consent.** For example, you may consent to removing one ovary if it is damaged, but not both ovaries.

What's next after endometriosis surgery?

For many people who have endometriosis surgery, their pain improves. If your surgeon was not able to remove all of the endometriosis during your surgery, you can continue to have pain after surgery. In some cases you may need to be referred to another surgical specialist to remove additional endometriosis. Some people still experience pelvic pain even after all of the endometriosis has been removed. This pain can be caused by other conditions that are common in people with endometriosis. Your surgeon might refer you to other specialists and allied health care providers, like pelvic floor physiotherapists, who can help treat and manage these conditions.

Recovery from surgery is different for everyone

Your surgeon will give you an estimate of how long your recovery might take, but recovery is different for everyone. Your pain levels after surgery may be unpredictable, higher some days and better on other days. You may experience fatigue or even post-surgical depression. This is common, but if you have any concerns about symptoms you are feeling either physically or mentally, contact your medical team for help.

Sometimes, pain comes back months or years after surgery. This can happen because of new endometriosis growth, or because of other conditions that cause pelvic pain. The chance of endometriosis coming back after surgery depends on where the endometriosis was located. Endometriosis on the ovaries is more likely to come back than endometriosis in other locations. Endometriosis on the bowel or bladder is not likely to come back. In some cases, taking medications for endometriosis may decrease the need for more surgeries. It's important to talk to your surgeon to figure out the best treatment plan for your specific situation.

There is no published research looking at what happens more than 10 years after excision surgery. More research is needed to understand the long-term outcomes after surgery for endometriosis.

Other conditions causing pelvic pain and symptoms that overlap with endometriosis

Chronic pelvic pain (CPP)

CPP is defined as pelvic pain that lasts for 6 months or longer. People diagnosed with CPP have typically tried treatments for other diseases that cause pelvic pain, like endometriosis, without having improvement in their pain.

Adenomyosis

This is a disease in which the lining of the uterus, which is usually on the surface, is found in the deeper muscle layers of the uterus. Adenomyosis is not "endometriosis in the uterus." It is a separate disease, not a type of endometriosis. Adenomyosis causes pelvic pain and/or heavy menstrual bleeding.

Irritable bowel syndrome (IBS)

IBS is a disorder of the bowel. People with IBS may experience abdominal pain, constipation and/or diarrhea, and bloating.

Chronic urological pain syndromes

These include both painful bladder syndrome and interstitial cystitis. There are conditions that cause pelvic and/or bladder pain and discomfort, and frequent urination because of pain.

Pelvic floor dysfunction

This is a condition where the pelvic floor muscles do not work correctly. This can result in many different issues like pelvic pain, painful sex, and bowel and bladder problems.

Ovarian cysts

These are sacs filled with fluid on the ovary. There are different kinds of ovarian cysts. Some ovarian cysts have no symptoms, but some may be painful. Ruptured or bleeding ovarian cysts can be extremely painful.

Vulvavaginal pain conditions

This refers to pain in the vagina, or around the outer part of the genitals (the vulva).

References

Allaire, C., Bedaiwy, M. A., & Yong, P. J. (2023). Diagnosis and management of endometriosis. *CMAJ*, 195(10), E363-E371.

Bafort, C., Beebeejaun, Y., Tomassetti, C., Bosteels, J., & Duffy, J. M. (2020). Laparoscopic surgery for endometriosis. *Cochrane Database Syst Rev*, 10(10), CD011031.

Clemens, J. Q., Erickson, D. R., Varela, N. P., & Lai, H. H. (2022). Diagnosis and Treatment of Interstitial Cystitis/Bladder Pain Syndrome. *J Urol*, 208(1), 34-42.

Healey, M., Cheng, C., & Kaur, H. (2014). To excise or ablate endometriosis? A prospective randomized double-blinded trial after 5-year follow-up. *J Minim Invasive Gynecol*, 21(6), 999-1004.

Jarrell, J. F., Vilos, G. A., Allaire, C., Burgess, S., Fortin, C., Gerwin, R., Lapensee, L., Lea, R. H., Leyland, N. A., Martyn, P., Shenassa, H., & Taenzer, P. (2018). No. 164-Consensus Guidelines for the Management of Chronic Pelvic Pain. *J Obstet Gynaecol Can*, 40(11), e747-e787.

Moayyedi, P., Benchimol, E. I., Armstrong, D., Yuan, C., Fernandes, A., & Leontiadis, G. I. (2020). Joint Canadian Association of Gastroenterology and Crohn's Colitis Canada Position Statement on Biosimilars for the Treatment of Inflammatory Bowel Disease. *J Can Assoc Gastroenterol*, 3(1), e1-e9.

Muto, M. G. (2023, January 30, 2023). Patient education: Ovarian cysts. UpToDate.

National Institute for Health and Care Excellence. (2021, December 9, 2021). Pelvic floor dysfunction:prevention and non-surgical management.

Roman, H., Chanavaz-Lacheray, I., Hennetier, C., Tuech, J. J., Dennis, T., Verspyck, E., & Merlot, B. (2023). Long-term risk of repeated surgeries in women managed for endometriosis: a 1,092 patient-series. *Fertil Steril*, 120(4), 870-879.

Singh, S. S., Gude, K., Perdeaux, E., Gattrell, W. T., & Becker, C. M. (2020). Surgical Outcomes in Patients With Endometriosis: A Systematic Review. *J Obstet Gynaecol Can*, 42(7), 881-888 e811.

Surrey, E. S., Soliman, A. M., Johnson, S. J., Davis, M., Castelli-Haley, J., & Snabes, M. C. (2018). Risk of Developing Comorbidities Among Women with Endometriosis: A Retrospective Matched Cohort Study. *J Womens Health* (Larchmt), 27(9), 1114-1123.

Thurston, J., Murji, A., Scattolon, S., Wolfman, W., Kives, S., Sanders, A., & Leyland, N. (2019). No. 377-Hysterectomy for Benign Gynaecologic Indications. *J Obstet Gynaecol Can*, 41(4), 543-557.

Wright, J., Lotfallah, H., Jones, K., & Lovell, D. (2005). A randomized trial of excision versus ablation for mild endometriosis. *Fertil Steril*, 83(6), 1830-1836.

Financial contribution:

Health Canada Santé Canada

The views expressed herein do not necessarily represent the views of Health Canada.

Clinical expert review by:

CanSAGE | Canadian Society for the Advancement of Gynecologic Excellence

Resources in this series

Surgery: A guide for people with endometriosis

Menopause: A guide for people with endometriosis

Mental health, well-being, and quality of life: A guide for people with endometriosis and those who support them

Extrapelvic endometriosis: A guide for people with endometriosis

Complementary and alternative medicine: A guide for people with endometriosis

Pelvic health physiotherapy: A guide for people with endometriosis

EndometriosisNetwork.com