PROCEDURE

Oophorectomy

Oophorectomy is surgery to remove one or both ovaries.

PURPOSE
Remove a diseased ovary or reduce future cancer risk

PROCEDURE TYPE
Both; surgical, usually minimally invasive

WHERE IT IS DONE
Operating theatre

ANAESTHESIA
General

HOW LONG IT TAKES
About 1-3 hours, longer with additional surgery

PREPARATION
Fasting, medication review, transport, and home support

RECOVERY
Same day to several days; no driving until safely mobile

MAIN RISKS
Bleeding, infection, organ injury, blood clots, early menopause

RESULTS
Operative findings immediately; pathology in several days to weeks

Overview

An oophorectomy is surgery to remove an ovary. A unilateral oophorectomy removes one ovary. A bilateral oophorectomy removes both.

The fallopian tube may be removed at the same time. This is called a salpingo-oophorectomy. Removing both ovaries and both tubes is called a bilateral salpingo-oophorectomy.

Most oophorectomies are performed through several small abdominal cuts using a camera. This is laparoscopic, or "keyhole," surgery. Robotic equipment may assist the surgeon. Some situations require open surgery through a larger abdominal cut.

Removing both ovaries before natural menopause causes surgical menopause because ovarian hormone production falls suddenly. Removing one ovary does not usually cause immediate menopause if the other ovary is functioning.

Why the procedure is performed

An oophorectomy may be offered to:

Cancer-risk reduction is most often considered for people with certain inherited gene changes or a strong family history. It usually involves removing both ovaries and fallopian tubes after careful discussion about fertility, menopause, and the timing of surgery.

When possible, the surgeon may remove only a cyst or the affected ovary rather than both ovaries.

- Remove an ovarian mass or cyst that is large, persistent, painful, or concerning
- Treat ovarian, fallopian tube, or nearby cancer
- Treat severe endometriosis when other treatment has not helped
- Remove badly damaged tissue after ovarian torsion, when an ovary twists
- Treat an infection that has not responded to antibiotics or drainage
- Reduce ovarian and fallopian tube cancer risk in someone with a high inherited risk

Who should and should not have it

Oophorectomy may be appropriate when the expected benefit of removing an ovary is greater than the effects and risks of surgery. Your age, symptoms, imaging results, future pregnancy plans, cancer risk, and whether one or both ovaries would be removed all matter.

It is not automatically the best treatment for every ovarian cyst or pelvic pain. Many cysts can be monitored, and removing normal ovaries can cause avoidable harm.

Elective surgery may be delayed or reconsidered if:

Urgent conditions, such as suspected torsion, internal bleeding, or a serious infection, may require surgery even when delay would otherwise be preferred.

Before bilateral surgery, ask how it could affect fertility, bone health, heart health, sexual function, and menopause symptoms. If cancer is suspected, a gynecologic oncologist-a specialist in cancers of the reproductive organs-may be involved.

- A cyst appears likely to settle without surgery
- Pregnancy is possible and treatment can safely wait
- An active infection or unstable heart or lung condition raises surgical risk
- Blood-thinning medicines have not been safely managed

- The effects on fertility and menopause have not been fully discussed

How to prepare

Your treating facility's own instructions take priority because preparation differs according to the surgical approach and any additional procedures.

You will usually be told when to stop eating and drinking before general anaesthesia. Tell the team about all medicines, vitamins, supplements, allergies, and previous reactions to anaesthesia.

Do not stop a blood thinner like warfarin or apixaban , diabetes medicine, or other prescribed treatment unless the surgical team gives you specific instructions.

Before surgery, confirm:

Arrange transport because you cannot drive yourself home after general anaesthesia. Follow instructions about bathing, jewelry, nail products, and what to bring.

- Whether one or both ovaries and fallopian tubes may be removed
- Whether the plan could change based on findings during surgery
- What preserving or removing an ovary means for fertility
- Whether tissue will be examined for cancer
- Who will take you home and stay with you afterward

What happens during the procedure

You receive general anaesthesia, so you are unconscious and do not feel the operation.

For laparoscopic surgery, the surgeon makes small cuts in the abdomen. Carbon dioxide gas gently expands the abdomen, creating space to see and work. A camera and surgical instruments are inserted through the cuts.

The surgeon separates the ovary, or the ovary and fallopian tube, from nearby tissue and seals the blood vessels. The tissue is placed in a specimen bag and removed through one of the cuts.

Open surgery uses a larger incision. It may be planned for a very large mass, suspected cancer, extensive scar tissue, or another complex condition. A laparoscopic operation may occasionally need to be changed to open surgery for safety.

If cancer is suspected, the operation may include further tissue sampling or removal. The agreed consent plan should explain what the surgeon is permitted to do if unexpected findings

arise.

Recovery and what to expect afterward

Pain: Abdominal soreness and cramping are expected. After laparoscopy, trapped gas can cause temporary shoulder-tip pain. Use pain relief as directed. Pain should gradually improve rather than become more severe.

Eating: You will usually start with fluids and light food, then return to your normal diet as tolerated. Nausea can occur after anaesthesia. Drinking fluids and walking gently can also help bowel function.

Activity: Begin with short walks and increase activity gradually. Avoid heavy lifting, strenuous exercise, swimming, and sex until your facility says these are safe. Recovery generally takes longer after open surgery than after laparoscopy.

Driving: Do not drive home. Resume driving only when you are no longer taking sedating pain medicine, can comfortably wear a seat belt, and can make an emergency stop without pain or hesitation. Your insurer or facility may have additional requirements.

Work: Return depends on the surgical approach and how physical your job is. Desk work may be possible sooner than lifting, prolonged standing, or manual work. Ask for a medical certificate if needed.

If both ovaries were removed before natural menopause, hot flushes, sleep changes, vaginal dryness, or mood changes can begin soon afterward. Hormone therapy may help some people, but it is not suitable in every situation. Your team should discuss its benefits and risks based on your age and reason for surgery.

Risks and possible complications

Possible surgical complications include:

Removing both ovaries causes permanent infertility using your own eggs and usually causes surgical menopause if menopause has not already occurred. Removing one ovary may reduce the number of available eggs, although the remaining ovary may continue releasing eggs and hormones.

Your personal risk depends on the reason for surgery, previous operations, other health conditions, and whether additional procedures are needed.

- Bleeding or the need for a blood transfusion

- Infection of the wound, pelvis, or urinary tract
- Injury to the bowel, bladder, ureter, blood vessels, or nerves
- Blood clots in the legs or lungs
- Anaesthesia-related breathing, heart, or medication problems
- Conversion from keyhole to open surgery
- Scar tissue that may later contribute to pain or bowel problems

Results and follow up

The surgeon can usually explain what was found shortly after the operation. Removed tissue is sent to a laboratory for examination under a microscope. This is called pathology.

Pathology commonly takes several days and may take longer when special testing is needed. Ask when and how you will receive the result rather than assuming no news means a normal result.

Routine follow-up may cover wound healing, pain, pathology findings, activity restrictions, menopause care, and whether further treatment is needed. If cancer is found, your team will explain the diagnosis and next steps at a dedicated appointment.

Alternatives

The alternatives depend on why surgery is being considered.

Monitoring with ultrasound avoids surgery and may suit a simple-appearing cyst. It does not remove the cyst, relieve every symptom, or provide a full tissue diagnosis.

Cystectomy removes the cyst while preserving more ovarian tissue. It may better protect fertility and hormone production, but it may not be suitable when cancer is suspected or little healthy ovary remains.

Pain medicine or hormonal treatment can help symptoms from some cysts or endometriosis. These treatments do not remove a suspicious mass, treat torsion, or provide pathology.

Antibiotics or image-guided drainage may treat some pelvic infections. Surgery may still be needed if infection persists, tissue is damaged, or the person becomes more unwell.

Removing only the fallopian tubes may reduce some ovarian cancer risk while preserving ovarian hormones. It does not provide the same established risk reduction as removing both tubes and ovaries for people at high inherited risk.

Cancer surveillance avoids immediate surgery, but current screening tests cannot reliably rule out early ovarian cancer. For a known high inherited risk, discuss the limits of surveillance with a genetics or gynecologic cancer specialist.

When to call your healthcare team

Contact your surgical team promptly for non-emergency concerns such as worsening wound redness, persistent vomiting, increasing pain, difficulty passing urine, constipation that is not improving, or possible menopause symptoms that are affecting daily life.

Seek urgent medical advice for:

Call emergency services for severe breathing difficulty, chest pain, fainting, confusion, uncontrolled bleeding, or sudden severe abdominal pain.

Routine questions about pathology, activity, work, or hormone treatment can usually wait for the surgical team's normal contact hours.

- Fever with worsening abdominal pain
- Heavy vaginal bleeding or bleeding that concerns you
- Pus, spreading redness, or opening of an incision
- A swollen, painful, or unusually warm leg
- Inability to keep fluids down

Common questions

Will I be asleep?

Yes. Oophorectomy is normally performed under general anaesthesia, so you are unconscious during the operation.

Can I drive home?

No. Arrange for an adult to take you home. Do not drive again until you can control the vehicle safely, are off sedating pain medicine, and meet your facility's instructions.

How painful is it?

Soreness, cramping, and fatigue are common. Keyhole surgery can also cause temporary shoulder pain from the gas used during surgery. Pain should become more manageable each day.

When will I know the results?

The surgeon can discuss the operative findings soon afterward. Laboratory examination of the tissue usually takes several days and sometimes longer.

Will I go into menopause?

Removing both functioning ovaries causes immediate surgical menopause. Removing one ovary usually does not, provided the other ovary continues to function.

Can I still become pregnant afterward?

Pregnancy may remain possible after one ovary is removed if the other ovary and reproductive organs function normally. Removing both ovaries ends natural egg production. Ask about fertility preservation before planned surgery if future pregnancy matters to you.

Sources

- American College of Obstetricians and Gynecologists. Opportunistic Salpingectomy as a Strategy for Epithelial Ovarian Cancer Prevention . Committee Opinion No. 774
- National Cancer Institute. Ovarian, Fallopian Tube, and Primary Peritoneal Cancers Prevention (PDQ®)
- National Institute for Health and Care Excellence. Ovarian cancer: identifying and managing familial and genetic risk . NICE Guideline NG241
- MedlinePlus. Ovary removal-discharge
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- Society of Gynecologic Oncology. Salpingectomy for Ovarian Cancer Prevention