CONDITION

Functional ovarian cysts

Functional ovarian cysts are fluid-filled sacs that form during normal ovulation and usually disappear on their own.

WHAT IT IS
Ovulation-related fluid-filled sac on or within an ovary

BODY SYSTEM
Reproductive system

MAIN SYMPTOMS
Pelvic pain, pressure, bloating, menstrual changes

WHAT CAUSES IT
Normal changes during ovulation

HOW IT IS DIAGNOSED
Pelvic ultrasound, sometimes with repeat imaging

MAIN TREATMENT
Observation, pain relief, and rarely surgery

CAN IT BE CURED?
Yes - most resolve, but new cysts can form

IS IT AN EMERGENCY?
Sometimes - sudden severe pain may signal twisting or bleeding

LONG-TERM OUTLOOK
Usually resolves within a few menstrual cycles

Overview

Functional ovarian cysts are fluid-filled sacs that develop as part of the menstrual cycle. They form on or inside an ovary, usually around the time an egg develops or is released. They are different from cysts caused by endometriosis, abnormal cell growth, or other ovarian conditions.

There are two main types. A follicular cyst forms when the follicle-the small sac containing a developing egg-does not release the egg and continues to grow. A corpus luteum cyst forms after an egg is released, when the emptied follicle seals and fills with fluid or blood.

These cysts are common during the years when you ovulate. Most are harmless, cause no symptoms, and disappear within several weeks or a few menstrual cycles. They are not cancer and do not turn into ovarian cancer.

A cyst can still matter if it causes ongoing pain, grows, bleeds, ruptures, or makes the ovary twist. An ovarian cyst found after menopause is unlikely to be functional and generally needs a different assessment.

Symptoms

Most functional ovarian cysts cause no symptoms. They may be discovered during an ultrasound or examination done for another reason.

When symptoms occur, they may include:

Pain can come and go. A corpus luteum cyst may bleed into itself, causing sharper pain. Pelvic pain has many possible causes, so symptoms alone cannot show whether a functional cyst is present.

Sudden, severe pain-especially with vomiting, weakness, dizziness, or fainting-needs urgent assessment. It can be a sign of ovarian twisting or significant bleeding rather than the usual course of a simple cyst.

- Dull or aching pain on one side of the lower abdomen or pelvis
- A feeling of pressure, heaviness, fullness, or bloating
- Pain during sex or certain movements
- Changes in the timing or flow of a period

Causes and risk factors

Functional cysts develop because of changes during ovulation. Ovulation is the process in which an ovary prepares and releases an egg.

In a normal cycle, a follicle grows around the egg and then opens to release it. A follicular cyst may form if the follicle does not open or shrink as expected. After ovulation, the follicle becomes a structure called the corpus luteum. A corpus luteum cyst may form if this structure seals and collects fluid or blood.

These changes are not caused by something you ate or did. Functional cysts are more likely while you are having menstrual cycles and ovulating. They are uncommon before puberty and after menopause.

Factors linked with a greater chance of developing an ovarian cyst include:

Having a risk factor does not mean that you will develop a cyst. Many functional cysts occur

without any clear risk factor beyond normal ovulation.

- A previous functional ovarian cyst
- Medicines that stimulate ovulation during fertility treatment
- Pregnancy, when a corpus luteum may remain for a time
- Some medicines that affect ovarian activity

Diagnosis

A healthcare professional may consider an ovarian cyst based on your symptoms, menstrual history, pregnancy possibility, and examination. Symptoms cannot confirm the diagnosis because conditions involving the bowel, bladder, uterus, pregnancy, or appendix can cause similar pain.

A pelvic ultrasound is the main imaging test. It uses sound waves to show the ovaries and surrounding structures. An internal, or transvaginal, ultrasound often gives the clearest view, although an abdominal ultrasound may also be used.

Ultrasound can show:

A pregnancy test may be needed because ectopic pregnancy-when a pregnancy develops outside the uterus-can cause pelvic pain and requires prompt care. Other blood tests are used only when the symptoms or scan findings make them useful.

A single scan may strongly suggest a functional cyst, but watching it disappear over time can help confirm that assessment. If you are well and the cyst appears simple, repeat ultrasound after one or more menstrual cycles may be recommended. Not every simple cyst needs follow-up imaging; this is based on factors such as its size, appearance, symptoms, age, and menopause status.

- The cyst's size and location
- Whether it contains clear fluid, blood, or solid areas
- Blood flow around the ovary
- Features that fit a simple functional cyst or suggest another cause

Treatment and management

Most functional ovarian cysts do not need active treatment. Watchful waiting means monitoring symptoms and allowing time for the cyst to shrink. Follow-up may include another

ultrasound, particularly if the cyst is larger, causes symptoms, or was not clearly simple on the first scan.

Over-the-counter pain medicine may help with mild discomfort. Which medicine is suitable depends on factors such as pregnancy, allergies, stomach ulcers, kidney disease, blood-thinning medicine, and other health conditions. Follow the product label and ask a pharmacist or healthcare professional if you are unsure.

Hormonal contraception that stops ovulation can reduce the chance of some new functional cysts forming while it is being used. However, combined birth control pills have not been shown to make an existing functional cyst disappear faster. Hormonal contraception is not appropriate for everyone and is not automatically needed after a cyst.

Surgery is uncommon for a typical functional cyst. It may be considered when a cyst:

When possible, surgery may remove only the cyst and preserve the ovary. In some circumstances, the affected ovary also has to be removed. The surgical approach depends on the cyst, your symptoms, and whether emergency treatment is needed.

- Persists or grows over time
- Causes significant or continuing symptoms
- Has an unusual or complex appearance
- Causes ovarian twisting or serious bleeding
- Cannot be confidently distinguished from another type of growth

Complications

Most functional cysts resolve without complications. Problems are more likely with larger cysts, although size alone does not predict what will happen.

A cyst may rupture , meaning it breaks open. A small rupture may cause brief pain and need only observation. A cyst that contains blood can sometimes cause heavier internal bleeding, leading to worsening pain, weakness, dizziness, or fainting.

Ovarian torsion happens when an ovary twists around the tissues supporting it. This can reduce or stop its blood supply. It usually causes sudden, strong pain on one side, often with nausea or vomiting. Torsion is an emergency because prompt surgery may be needed to untwist the ovary.

Functional cysts do not become cancer. However, not every ovarian growth is functional. A cyst that persists, has solid areas, or is found after menopause may need more testing to

determine what it is.

Prevention

Functional ovarian cysts cannot always be prevented because they arise from normal ovulation. There is no proven diet, supplement, exercise routine, or lifestyle change that reliably prevents them.

Hormonal contraception that suppresses ovulation may reduce the formation of new functional cysts while it is used. It does not remove an existing cyst and may not be suitable or wanted in every situation.

If cysts keep returning, a healthcare professional can review whether hormonal contraception or further investigation would be appropriate.

Living with it and what to expect

A functional ovarian cyst usually shrinks within several weeks or a few menstrual cycles. During that time, symptoms may improve gradually or come and go. Some people have no symptoms throughout.

You may be advised to monitor pain, bleeding, or changes in your cycle. Routine follow-up is important if repeat imaging has been recommended, even if you feel better. A cyst that does not disappear may not be functional and can need further assessment.

Everyday activities are often possible when symptoms are mild. If exercise or sex repeatedly triggers pain, reducing or pausing that activity until the cyst is reviewed may be sensible. New or sharply worsening pain should not simply be pushed through.

Having one functional cyst does not mean that your ovaries are permanently damaged. It also does not usually reduce fertility. New cysts can form in later cycles, however, because ovulation continues.

When to get medical help

Arrange a routine appointment if you have persistent pelvic pain, pressure, bloating, pain during sex, or menstrual changes. You should also follow up if symptoms continue after a cyst was expected to resolve or if a recommended repeat ultrasound has not been completed.

Seek prompt medical advice if pain becomes noticeably worse, you develop a fever, or you

have unusual vaginal bleeding. These symptoms may have causes other than an ovarian cyst and may need assessment.

Get urgent or emergency help for:

These symptoms can occur with ovarian torsion, internal bleeding, ectopic pregnancy, or another urgent abdominal condition. Do not wait for a routine follow-up appointment if they occur.

- Sudden, severe, or rapidly worsening pelvic or abdominal pain
- Pain with nausea or repeated vomiting
- Dizziness, fainting, marked weakness, or pale, clammy skin
- Severe pain when you could be pregnant
- Heavy bleeding or symptoms suggesting significant blood loss

Common questions

How long does a functional ovarian cyst last?

Many disappear within six to eight weeks or a few menstrual cycles. A cyst that persists, enlarges, or keeps causing symptoms may need another ultrasound or further assessment.

Can a functional ovarian cyst become cancer?

No. Functional cysts are related to ovulation and do not turn into cancer. However, an ovarian growth with an unusual appearance may need testing to confirm that it is a functional cyst rather than another type of growth.

Can I get pregnant if I have a functional ovarian cyst?

Usually, yes. A single functional cyst does not normally prevent pregnancy or permanently affect fertility. Fertility may be influenced by another condition if the growth is not functional or if cysts are part of a separate ovarian problem.

Can a functional cyst delay my period?

It can affect the timing or flow of a period because it is linked with the menstrual cycle. A late period can also be caused by pregnancy or many other factors. If pregnancy is possible, taking a pregnancy test is important.

Can exercise or sex make an ovarian cyst rupture?

Rupture can occur without a clear trigger, but vigorous activity or sex may sometimes bring on pain when a cyst is present. Most cysts do not rupture during normal activity. Sudden severe pain after activity or sex needs urgent assessment.

Why do functional ovarian cysts keep coming back?

New cysts can form during later ovulation cycles even after an earlier cyst has disappeared. Repeated symptoms should be reviewed to confirm that the cysts are functional and to discuss whether preventing ovulation is an appropriate option.

Sources

- American College of Obstetricians and Gynecologists: Ovarian Cysts
- NHS: Ovarian cyst
- Royal College of Obstetricians and Gynaecologists: Ovarian cysts before the menopause
- Office on Women's Health: Ovarian cysts
- Grimes DA, Jones LB, Lopez LM, Schulz KF. Oral contraceptives for functional ovarian cysts. Cochrane Database of Systematic Reviews. 2014
- Levine D, Patel MD, Suh-Burgmann EJ, et al. Simple Adnexal Cysts: SRU Consensus Conference Update on Follow-up and Reporting. Radiology. 2019;293:359-371