

WomensHealth.gov I-800-994-9662 TDD: I-888-220-5446

Ovarian Cysts

Q: What are ovaries?

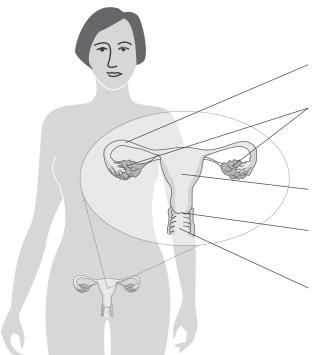
A: The ovaries are a pair of organs in the female reproductive system. They are located in the pelvis, one on each side of the uterus, which is the hollow, pear-shaped organ where a baby grows. Each ovary is about the size and shape of an almond. The ovaries produce eggs and female hormones. Hormones are chemicals that control the way certain cells or organs function.

Every month, during the menstrual cycle, an egg is released from one ovary in a process called ovulation. The egg travels from the ovary through the fallopian tube to the uterus. The ovaries are also the main source of the female

hormones estrogen and progesterone. These hormones influence the development of a woman's breasts, body shape, and body hair. They also regulate the menstrual cycle and pregnancy.

Q: What are ovarian cysts?

A: A cyst is a fluid-filled sac, and can be located anywhere in the body. On the ovary, different types of cysts can form. The most common type of ovarian cyst is called a functional cyst, which often forms during the normal menstrual cycle. Each month, a woman's ovaries grow tiny cysts that hold the eggs. When an egg is mature, the sac breaks open to release the egg, so it can travel through the fallopian tube for fertilization. Then the sac dissolves. In one type of functional cyst, called a follicular cyst, the sac doesn't break open to release the egg and may continue to



Fallopian tube

connects the ovary to the uterus

Ovaries

two small glands next to the uterus that make hormones, such as estrogen, which spark the start of your menstrual cycle, and release one egg about once a month until menopause

Uterus (womb)

an inside area or pocket where a baby grows

Cervix

the narrow entryway in between the vagina and uterus

Vagina

a hollow canal or tube made of muscle that can grow wider to deliver a baby that has finished growing inside the uterus

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WomensHealth.gov I-800-994-9662 TDD: I-888-220-5446 grow. This type of cyst usually disappears within one to three months. A corpus luteum cyst, another type of functional cyst, forms if the sac doesn't dissolve. Instead, the sac seals off after the egg is released. Fluid then builds up inside of it. This type of cyst usually goes away on its own after a few weeks. However, it can grow to almost four inches and may bleed or twist the ovary and cause pain. Clomid or Serophene, which are drugs used to induce ovulation, can raise the risk of getting this type of cyst. These cysts are almost never associated with cancer.

There are also other types of cysts:

- Endometriomas. These cysts develop in women who have endometriosis, when tissue from the lining of the uterus grows outside of the uterus. The tissue may attach to the ovary and form a growth. These cysts can be painful during sexual intercourse and during menstruation.
- **Cystadenomas.** These cysts develop from cells on the outer surface of the ovary. They are often filled with a watery fluid or thick, sticky gel. They can become large and cause pain.
- **Dermoid cysts.** The cells in the ovary are able to make hair, teeth, and other growing tissues that become part of a forming ovarian cyst. These cysts can become large and cause pain.
- Polycystic ovaries. The eggs mature within the follicles, or sacs, but the sac doesn't break open to release the egg. The cycle repeats, follicles continue to grow inside the ovary, and cysts form. For more

information about polycystic ovaries, refer to our FAQ on Polycystic Ovarian Syndrome.

Q: What are the symptoms of ovarian cysts?

- **A:** Many women have ovarian cysts without having any symptoms. Sometimes, though, a cyst will cause these problems:
 - pressure, fullness, or pain in the abdomen
 - dull ache in the lower back and thighs
 - problems passing urine completely
 - pain during sexual intercourse
 - weight gain
 - painful menstrual periods and abnormal bleeding
 - nausea or vomiting
 - breast tenderness

If you have these symptoms, get help right away:

- pain with fever and vomiting
- sudden, severe abdominal pain
- faintness, dizziness, or weakness
- rapid breathing

Q: How are ovarian cysts found?

A: Since ovarian cysts may not cause symptoms, they are usually found during a routine pelvic exam. During this exam, your doctor is able to feel the swelling of the cyst on your ovary.

Once a cyst is found, the doctor may perform an ultrasound, which uses

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WomensHealth.gov I-800-994-9662 TDD: I-888-220-5446 sound waves to create images of the body. With an ultrasound, the doctor can see how the cyst is shaped; its size and location; and whether it's fluid-filled, solid, or mixed. A pregnancy test is also done. Hormone levels (such as LH, FSH, estradiol, and testosterone) may also be checked. Your doctor may want to do other tests as well.

To find out if the cyst might be cancerous, your doctor may do a blood test to measure a substance in the blood called CA-125. The amount of this protein is higher if a woman has ovarian cancer. However, some ovarian cancers do not make enough CA-125 to be detected by the test. There are also non-cancerous diseases that increase the levels of CA-125, like uterine fibroids and endometriosis. These non-cancerous causes of increased CA-125 are more common in women under 35, while ovarian cancer is very uncommon in this age group. For this reason, the CA-125 test is recommended mostly for women over age 35, who are at high risk for the disease and have a cyst that is partially solid.

Q: How are cysts treated?

A: Watchful waiting. The patient waits and gets re-examined in one to three months to see if the cyst has changed in size. This is a common treatment option for women who are in their childbearing years, have no symptoms, and have a fluid-filled cyst. It also might be an option for postmenopausal women.

Surgery. If the cyst doesn't go away after several menstrual periods, has gotten larger, looks unusual on the ultrasound, causes pain, or you're post-

menopausal, the doctor may want to remove it. There are two main surgical procedures:

- Laparoscopy—if the cyst is small and looks benign on the ultrasound, your doctor may perform a laparoscopy. This procedure is done under general anesthesia. A very small incision is made above or below the navel, and a small instrument that acts like a telescope is inserted into the abdomen. If the cyst is small and looks benign, it can be removed.
- Laparotomy—if the cyst is large and looks suspicious, the doctor may perform a procedure called a laparotomy. This procedure involves making bigger incisions in the stomach to remove the cyst. While you are under general anesthesia, the doctor is able to have the cyst tested to find out if the tissue is cancerous. If it is cancerous, the doctor may need to remove the ovary and other tissues that may be affected, like the uterus or lymph nodes.

Birth control pills. If you frequently develop cysts, your doctor may prescribe birth control pills to prevent you from ovulating. This will lower the chances of forming new cysts.

Q: Can ovarian cysts be prevented?

A: Ovarian cysts cannot be prevented. Fortunately, the vast majority of cysts don't cause any symptoms, are not related to cancer, and go away on their own. Talk to your doctor or nurse if you notice any changes in your period, pain in the pelvic area, or any of the major symptoms listed above. A pelvic exam, possibly with an ultrasound, can

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WomensHealth.gov I-800-994-9662 TDD: I-888-220-5446 help determine if a cyst is causing the problem. If a woman is not seeking pregnancy and develops functional cysts, frequently, future cysts may be prevented by taking oral contraceptives, Depo-Provera, or Norplant.

Q: When are women most likely to have ovarian cysts?

A: Functional ovarian cysts usually occur during the childbearing years. Most often, cysts in women of this age group are not cancerous. Women who are past menopause (ages 50-70) with ovarian cysts have a higher risk of ovarian cancer. At any age, if you think you have a cyst, it's important to tell your doctor.

For More Information...

You can find out more about ovarian cysts by contacting the National Women's Health Information Center (NWHIC) at 1-800-994-9662 or the following organizations:

Agency for Healthcare Research & Quality (AHRQ), HHS

Phone: (800) 358-9295

Internet Address: http://www.ahrq.gov

National Institute of Child Health and Human Development (NICHD), NIH, HHS

Phone: (800) 370-2943 Internet Address:

http://www.nichd.nih.gov/womenshealth

American Academy of Family Physicians (AAFP)

Internet Address: http://familydoctor.org

American Society for Reproductive Medicine (ASRM)

Phone: (205) 978-5000

Internet Address: http://www.asrm.org

InterNational Council on Infertility Information Dissemination, Inc. (INCIID)

Phone: (703) 379-9178

Internet Address: http://www.inciid.org

The ovarian cysts FAQ was reviewed by Dr. Evan Myers at the Duke University Medical Center.

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