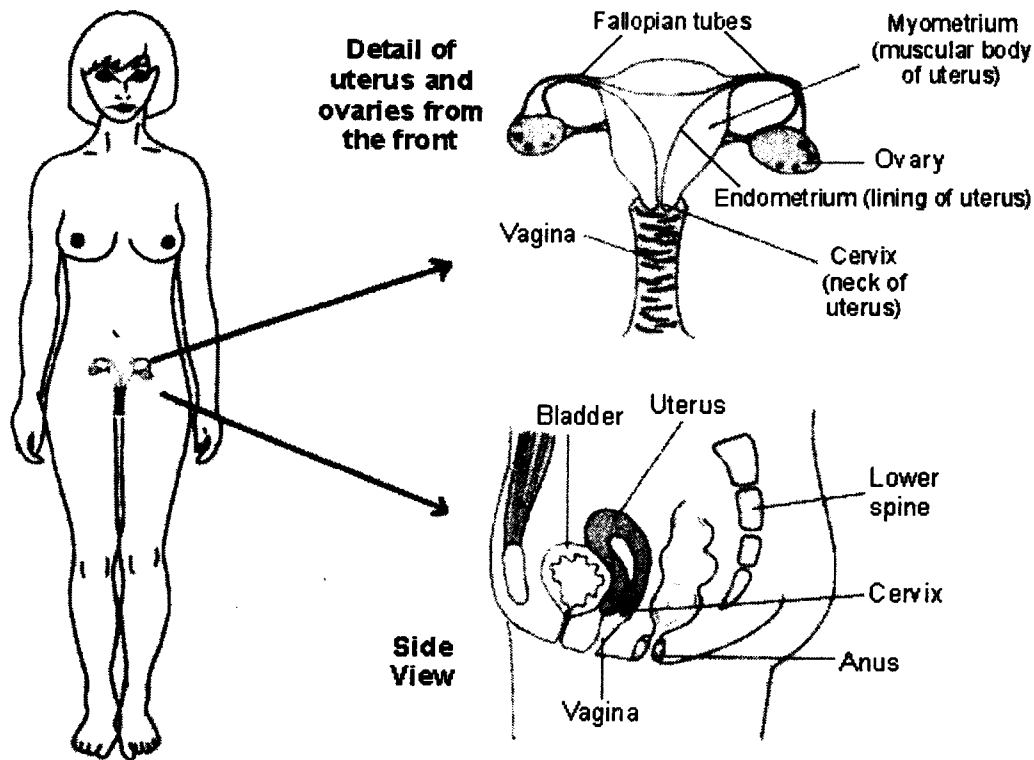


Ovarian Cysts

An ovarian cyst is a fluid filled sac which develops in an ovary. Most ovarian cysts are benign (non-cancerous) and cause no symptoms. Some cause problems such as pain. No treatment may be needed for certain types of ovarian cysts which tend to go away on their own. In other types it is best to have them surgically removed.

What are the ovaries?

Women have two ovaries, one on either side of the uterus (womb) in the lower abdomen. Ovaries are small and round, each about the size of a walnut. The ovaries make eggs. In fertile women, each month an egg (ovum) is released from one of the ovaries. The egg passes down the fallopian tube into the uterus where it may be fertilised by a sperm.



The ovaries also make hormones including the main 'female' hormones - oestrogen and progesterone. These hormones pass into the bloodstream and have various effects on other parts of the body including regulating the menstrual cycle and periods.

Ovulation

In women of childbearing age, an egg (ovum) forms and matures each month in a tiny structure within an ovary called a follicle. When the egg is released (at ovulation) the follicle turns into a small structure called a corpus luteum. If you become pregnant the corpus luteum forms hormones to help with the pregnancy. If you do not become pregnant, the corpus luteum shrinks and goes away within a couple of weeks.

What are ovarian cysts?

A cyst is a fluid filled sac. Cysts develop in various places in the body. Depending on the type of cyst the fluid within the cyst can range from thin and watery to thick and paste-like. Some cysts have a thicker solid outer part with some fluid within.



The ovaries are quite a common site for cysts to develop. Most ovarian cysts are benign (non-cancerous) but some are cancerous, or may become cancerous over time. Ovarian cysts can vary in size - from less than the size of a pea to the size of a large orange (sometimes even larger). There are various types which include the following:

Functional ovarian cysts

These are the most common type. They form in some women of childbearing age (women who still have periods) when there is a 'functional' fault with ovulation. There are two types:

- Follicular cysts. A follicle (see above) can sometimes enlarge and fill with fluid. They can grow up to 5 cm across. They usually go away by themselves within a few months.
- Corpus luteum cysts occur when the corpus luteum (described above) fills with fluid or blood to form a cyst. (A blood filled cyst is sometimes called a haemorrhagic cyst.) These kind of cysts can grow up to 6 cm across. They usually go away on their own within a few months.

Dermoid cyst (sometimes called benign mature cystic teratomas)

These cysts can grow quite large - up to 15 cm across. These cysts often contain odd contents such as hair, parts of teeth or bone, fatty tissue, etc. This is because these cysts develop from cells which make eggs in the ovary. An egg has the potential to develop into any type of cell. So, these cysts can make different types of tissue. In about 1 in 10 cases a dermoid cyst develops in both ovaries. Dermoid cysts tend to occur in younger women.

Cystadenomas

These develop from cells which cover the outer part of the ovary. There are different types. For example, 'serous cystadenomas' fill with a thin fluid and 'mucinous cystadenomas' fill with a thick mucus type fluid. These type of cysts are often attached to an ovary by a stalk rather than grow within the ovary itself. Some grow very large. They are usually benign but some are cancerous.

Endometriomas

Many women who have endometriosis develop one or more cysts on their ovaries. Endometriosis is a condition where endometrial tissue (the tissue that lines the uterus) is found outside the uterus. It sometimes forms cysts which fill with blood. The old blood within these cysts looks like chocolate and so these cysts are sometimes called 'chocolate cysts'. They are benign. See separate leaflet called 'Endometriosis'.

Polycystic ovary syndrome (PCOS)

Polycystic means 'many cysts'. If you have PCOS you develop many tiny benign cysts in your ovaries. The cysts develop due to a problem with ovulation caused by a hormone imbalance, but the exact cause is not clear. PCOS is associated with period problems, reduced fertility, hair growth, obesity, and acne. See separate leaflet called 'Polycystic Ovary Syndrome'.

Others

There are various other rare types of ovarian cysts. There are also various types of benign ovarian tumours which are solid and not cystic (do not have fluid in the middle).

What are the symptoms, problems and possible complications?

Most ovarian cysts are small, benign (non-cancerous), and cause no symptoms. In particular, functional ovarian cysts in younger women are common. Some ovarian cysts cause problems and may include one or more of the following.

- Pain or discomfort in the lower abdomen. The pain may be constant or intermittent. Pain may only occur when you have sex.
- Periods sometimes become irregular, or may become heavier or lighter than usual.
- Sometimes a cyst may bleed into itself, or burst. This can cause a sudden severe pain in the lower abdomen.
- Occasionally, a cyst which is growing on a stalk from an ovary may twist the stalk on itself (a 'torsion'). This stops the blood flowing through the stalk to the cyst and cause the cyst to



- lose its blood supply. This can cause sudden severe pain in the lower abdomen.
- Large cysts can cause your abdomen to swell, or press on nearby structures. For example, on the bladder or rectum which may cause urinary symptoms or constipation.
 - Women with endometriosis or polycystic ovary syndrome will usually have other symptoms too - see separate leaflets.
 - Although most cysts are benign, some types have a risk of becoming cancerous. (See separate leaflet called ovarian cancer.)
 - Rarely, some ovarian cysts make abnormal amounts of female (or male) hormones which can cause unusual symptoms.

How is an ovarian cyst diagnosed?

- As most ovarian cysts cause no symptoms, many cysts are diagnosed by chance. For example by a routine examination, or if you have an ultrasound scan for another reason.
- If you have symptoms suggestive of an ovarian cyst your doctor is likely to do a vaginal examination. He or she may be able to feel an abnormal swelling which may be a cyst.
- An ultrasound scan can confirm an ovarian cyst. An ultrasound scan is a safe and painless test which uses sound waves to create images of organs and structures inside your body. The probe of the scanner may be placed on your abdomen to scan the ovaries. A small probe is also commonly placed inside the vagina to scan the ovaries from this angle.

You doctor may also take a sample of blood to test for a protein called CA-125. In particular, in older women. It is a tumour marker and helps to rule out cancer. (The level is high in about half of women with early ovarian cancer. Other non-cancerous conditions can also cause a high level. So this test does not conclusively diagnose or rule out ovarian cancer, but it can be a helpful test.)

What is the treatment for ovarian cysts?

Your specialist will advise on the best course of action. This depends on factors such as your age, whether you are past the menopause, the appearance and size of the cyst from the ultrasound scan, and whether you have symptoms.

Observation - common in younger women with small cysts

If the specialist is confident that you have a small functional cyst (common in women before the menopause) then he or she may simply suggest that you have a repeat ultrasound scan in a month or so. Most functional ovarian cysts go away on their own over a few weeks or so. If it goes away then no further action is needed.

Surgical removal may be advised

Removal of an ovarian cyst may be advised if you have symptoms. Also, even if you do not have symptoms it may not be possible to tell exactly what type of cyst you have until it is taken out and looked at under the microscope. As there is a risk that some may be cancerous, or turn cancerous, removal is often the best option. Some smaller cysts can be removed by a laparoscopic surgery ('key hole' surgery). Some cysts require a more traditional style operation.

The extent of the operation depends on factors such as the type of cyst, your age, whether cancer is suspected or ruled out. In some cases, just the cyst is removed and the ovary tissue preserved. In some cases, the ovary is also removed, and sometimes other nearby structures such as the uterus and the other ovary. Your specialist will advise on the options for your situation.

Endometriosis related cysts and polycystic ovary syndrome

See separate leaflets about these conditions and their treatment.

