

Focus on Ovarian Cysts

An ovarian cyst is a sac filled with fluid or semisolid material that forms within one or both ovaries. Ovaries are small organs in the female pelvis and form part of the reproductive system. Ovaries produce eggs and female hormones known as oestrogen and progesterone. The prevalence of ovarian cysts is unclear as most cysts are not symptomatic, do not get treated and resolve without treatment. In 2020, it was estimated that almost 7% of women in the world developed an ovarian cyst at some point in their lives.

What are the two types of ovarian cysts?

1. Functional cysts

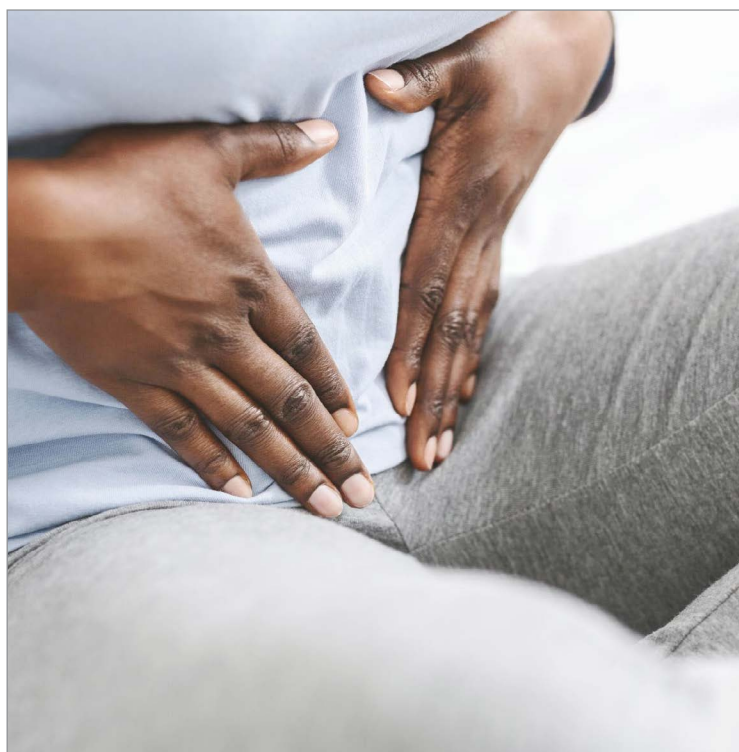
Most ovarian cysts are functional and form in response to the body's changes during the menstrual cycle. Functional cysts are sometimes called simple cysts, as they occur during ovulation, which is when the egg is released from the ovary. They can be a sign that the ovaries are functioning as they should. Functional cysts generally shrink without treatment. There are two types of functional cysts:

- **Follicular cysts** – form when the follicle (a small sac in the ovary) does not release an egg during the menstrual cycle but fills with fluid and grows bigger.
- **Corpus luteum cysts** – when the follicle releases an egg, a hormone-producing group of cells called the corpus luteum is formed. If the fluid collects in the corpus luteum, a cyst forms and grows.

2. Other cysts

There are cysts that are not related to the menstrual cycle, but they may not always be a sign of a disease. They include:

- **Cystadenomas** – these cysts form on the ovary's surface and can be filled with fluid, watery or mucous material. The cysts can grow very large, increasing the likelihood of ovarian twisting.
- **Dermoid cysts or teratomas** – these cysts form from the cells that make eggs in the ovary. The cyst can contain tissue, such as hair, skin, or teeth. The cysts can also grow very large and increase the chance of ovarian twisting.



- **Endometriomas** – these cysts form when endometrial tissue (tissue that lines the uterus and sheds during menstruation) attaches to the ovary.
- **Polycystic ovarian syndrome (PCOS)** – is characterised by the presence of multiple small cysts within both ovaries. PCOS is associated with hormonal problems and is the most common cause of infertility.

Who is affected by ovarian cysts?

Anyone with ovaries can develop an ovarian cyst, but the following can increase the risk of developing ovarian cysts:

- Age – ovarian cysts are more common during child-bearing age.

- Hormonal problems – fertility medicines taken to help with ovulation.
- History of ovarian cysts – there is a likelihood of an ovarian cyst recurrence.
- Ovulation – increases the risk of ovarian cysts.
- Endometriosis – some of the tissue lining the uterus can attach to the ovary and form a cyst.
- Pelvic inflammatory disease (PID) – severe pelvic infections can spread to the ovaries and cause cysts.
- Pregnancy status – sometimes a follicle that forms during ovulation can stay on the ovary throughout the pregnancy.
- Abnormal cell reproduction – can cause cysts like dermoids and cystadenomas to form.

What are the signs and symptoms of an ovarian cyst?

Most ovarian cysts are discovered incidentally during a routine pelvic examination or abdominal ultrasound. However, ovarian cysts cause symptoms if they rupture, are very large or block the blood supply to the ovaries.

The following are symptoms can be experienced:

- Painful and irregular menstrual periods;
- Abdominal fullness and bloating;
- Persistent one-sided lower abdominal pain;
- Indigestion, heartburn, or early satiety;
- Difficult bowel movements;
- Lower back pain;
- Pain during intercourse;
- Frequent urination due to pressure on the bladder;
- Twisting or rupture of the cyst may lead to more severe pain. Cyst rupture is characterised by sudden, unilateral, sharp pelvic pain, abdominal distention, nausea and vomiting, and bleeding;
- Difficulty falling pregnant;
- PCOS presents with irregular periods, hirsutism (increased hair growth on the face and body), irregular periods, infertility, acne, obesity, and difficulty losing weight.

Immediate medical attention should be sought if the following signs are noticed:

- Sudden severe abdominal pain, accompanied by vomiting or fever.
- Feeling light-headed or faint and breathing rapidly.
- Cold, clammy skin.

How is an ovarian cyst diagnosed?

The healthcare practitioner will take history and perform a physical examination to rule out the cause of symptoms. The following tests may be performed to diagnose an ovarian cyst:

- A pelvic examination – is performed to feel the inside of

the pelvis for any lumps or changes.

- Ultrasound – is done to detect ovarian cysts, their location and whether they are fluid or solid.
- Blood test – a certain blood test called Cancer antigen 125 (CA125) may be performed; an increased level may raise a suspicion of ovarian cancer, especially in women who have reached menopause.
- Laparoscopy – is a surgical procedure performed in a hospital. The doctor inserts a camera through a small cut in the abdomen to view the pelvic cavity and reproductive organs. A cyst found during the procedure is removed.

How is an ovarian cyst treated?

Treatment depends on factors such as age, symptoms, and the cause of a cyst. The following approaches may be used:

• **Watchful waiting**

Functional ovarian cysts usually go away without treatment, so a wait-and-see approach may be suggested. A follow-up ultrasound within a few weeks or months after a diagnosis may be recommended to check if the cyst has resolved on its own or not.

• **Ovarian cyst medications**

The doctor may prescribe medications containing hormones, such as birth control pills, to stop ovulation and prevent future cysts from forming.

• **Surgery**

If a cyst is causing symptoms and getting bigger, surgery may be needed to remove the cyst. The type of surgery will depend on the size of the cyst and its appearance on ultrasound.

What are the complications of an ovarian cyst?

- Ruptured ovarian cyst – a functional cyst that has grown can rupture, causing severe abdominal pain and swelling.
- Torsion of the ovary – cysts can grow and change the shape of the ovary, increasing the ovary's chance of twisting. Twisting can stop the blood flow to the affected ovary, causing the ovary to die.
- Cancerous cyst – ovarian cysts that develop after menopause are more likely to be cancerous than cysts that form before menopause.

Can ovarian cysts be prevented?

Birth control pills can be recommended to stop ovulation and reduce the chance of certain ovarian cyst recurrence. However, as functional cysts are harmless, prevention should not be a concern. Any symptoms that may indicate a cyst should be reported to the healthcare practitioner for further management.

Ovarian cysts and fertility

Ovarian cysts can sometimes make it harder to conceive. If surgery is needed to remove cysts, the doctor will perform the procedure while aiming to preserve fertility as much as possible. This may mean removing a cyst and leaving the ovaries intact or only removing one ovary. In instances where both ovaries need to be removed, the body will no longer be able to produce any eggs. It is important to understand the effects of surgery on fertility before the procedure is done.

What is covered as PMB level of care?

“Ovarian cysts” are included in PMB regulations under Diagnosis and Treatment Pair (DTP) code 434M. This DTP refers to “Non-inflammatory disorders and benign neoplasms of ovary, fallopian tubes and uterus”. The Treatment component specified for this DTP is “*Salpingectomy; oophorectomy; hysterectomy; medical and surgical management*”. The medical schemes must pay for the diagnosis, treatment, and follow-up consultations and treatment in full if the services were obtained from a designated service provider (DSP).

In case of an emergency, healthcare services must be paid in full, even if a non-DSP was used. The healthcare practitioner must assist the member in completing the forms to register for PMB benefits which must be funded by the medical scheme from the risk-benefit. Funding of PMB claims from the Medical Savings Account (MSA) contravenes the Medical Schemes Act. The medical schemes must flag possible PMB diagnoses for correct payment from the risk-benefit.

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