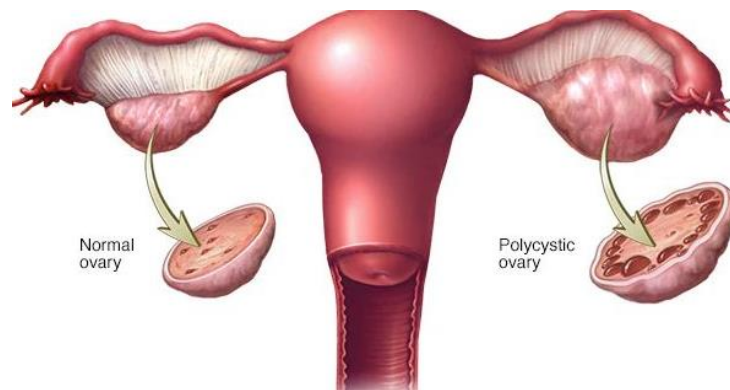




Polycystic Ovary Syndrome (PCOS)

Polycystic ovary syndrome (PCOS) is a disorder that occurs in women during the reproductive age and causes dysfunction in the ovaries and ovulation. PCOS ovaries will have multiple, fluid-filled follicles that are unable to mature, produce, and ovulate an egg. In addition, PCOS causes hormone imbalances that affect menstrual cycles and make it difficult to achieve pregnancy.



SYMPTOMS

Signs indicative of PCOS usually arise with the first period that occurs during puberty. Symptoms can be more severe with obesity and will vary in general with each woman. Common signs and symptoms of PCOS include:

- **Infertility due to not ovulating (the most common cause of female infertility)**
- **Infrequent, absent, and/or irregular menstrual periods**
- **Hirsutism (increased hair growth on the face, chest, stomach, back, thumbs, or toes)**
- **Cysts on the ovaries**
- **Acne or oily skin**
- **Weight gain or obesity, usually with extra weight around the waist**
- **Male-pattern baldness or thinning hair**
- **Patches of skin on the neck, arms, breasts, or thighs that are thick, dark brown or black**
- **Skin tags (excess flaps of skin in the armpits or neck area)**
- **Pelvic pain**
- **Mood changes (anxiety or depression)**
- **Sleep problems (insomnia, poor sleep or sleep apnea)**

CAUSES

While the exact cause of PCOS remains unknown, contributing factors in relation to the diagnosis of PCOS include:

- **Excess insulin:** with the PCOS patient, high blood sugar levels can cause increasing levels of the hormone insulin. Excess amounts of insulin can increase the production of androgen, making ovulation challenging.
- **Low-grade inflammation:** studies suggest that patients diagnosed with PCOS have a low-grade inflammation, which causes the ovaries to produce increasing levels of androgen.
- **Heredity:** studies also suggest that genetic factors can also be linked to PCOS.
- **Excess androgen:** high androgen levels cause hirsutism and acne (symptoms of PCOS).

DIAGNOSIS

A diagnosis of PCOS is made when you experience at least two of the following:

- **Irregular periods:** infrequent, irregular or prolonged menstrual cycles
- **Excess male hormone:** high levels androgen, resulting in hirsutism and acne
- **Polycystic ovaries:** enlarged ovaries that show follicles surrounding the eggs

There is no single test to diagnose PCOS, but there are evaluations that suggest PCOS including:

- **Pelvic exam (to check for any abnormalities)**
- **Transvaginal ultrasound (to check for cysts on ovaries)**
- **Blood tests (FSH, LH, testosterone and estrogens)**

TREATMENT

Various treatments for PCOS include lifestyle changes related to physical activity and diet, as well as, medication to cause ovulation. These medications include:

- **Letrozole (Femara):** although used to treat breast cancer, taking Letrozole tablets cycle day 3-5 can stimulate follicular growth and produce a mature egg.
- **Clomiphene (Clomid):** taking Clomid (an anti-estrogen medication) tablets cycle day 3-5 can also stimulate follicular growth and produce a mature egg.
- **Gonadotropins:** hormone shots, given by injection, every other cycle day can stimulate follicular growth and produce a mature egg.