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Polycystic Ovarian
Syndrome (PCOS)



What is the definition of polycystic ovary syndrome or polycystic ovaries?

It is one of the most prevalent health issues and hormonal disorders among women, and is accompanied by a variety of symptoms, such as metabolic issues, irregular menstruation, excessive hair growth, and acne.

What are the symptoms that can be observed in polycystic ovaries?

- Menstrual irregularity is most frequently characterized by irregular or delayed menstruation.
- profuse bleeding
- Excessive hair (Hirsutism).
- Acne,
- Overweight,
- Pregnancy delay or difficulty getting pregnant. Polycystic ovary syndrome is the leading cause of infertility in women.
- Diabetes type 2 symptoms,
- Acanthosis Nigerians is a medical term for a change in skin color to a darker color that can reach blackness in certain areas of the body, such as the back of the neck, armpits, genital area, or under the breasts.
- Pattern baldness in men
- headache

What are the causes that can be observed in polycystic ovaries?

The precise causes of PCOS are unknown, but a high level of the androgen hormone affects ovarian function, leading to an imbalance in reproductive hormones and an inability of the ovaries to form and release eggs naturally.



Elevated male androgen hormones are associated with several factors and causes, which include the following:

Polycystic ovary syndrome is more prevalent in women whose mothers suffered from polycystic ovary syndrome or type 2 diabetes.

Insulin resistance.

Overweight.



What are the complications that can be observed in polycystic ovary syndrome or polycystic ovaries?

- 1. Endometrial cancer.
- 2. Infertility.
- 3. Diabetic condition of the second type
- 4. hypertension
- 5. breast cancers

What is the prognosis in polycystic ovary syndrome or polycystic ovary?

There is no single test to diagnose PCOS, but at least two of the following must be present for PCOS to be diagnosed:

- 1. Menstrual abnormalities
- 2. Acne, hirsutism, and an increase in the level of the hormone androgen, or an increase in androgen levels.
- 3. Ovarian cysts or polycystic ovaries, characterized by an enlargement and increase in the size of the ovaries, which contain a large number of small cysts and are detected by ultrasound.

It should be noted that despite the name PCOS, the detection of polycystic ovaries alone is not sufficient to confirm the diagnosis of polycystic ovary syndrome, as some women may have polycystic ovaries without polycystic ovary syndrome, in which case a diagnosis of polycystic ovary syndrome may be made.

Some women without polycystic ovaries have ovaries.

What are the diagnosis tests in polycystic ovary syndrome or polycystic ovaries?

When diagnosing PCOS, certain tests may be performed to rule out other potential causes, including the following:

- 1. medical record
- 2. examination of the body
- 3. Pelvic examination
- 4. Pelvic Ultrasound, which is used to examine the ovaries and measure the endometrium's thickness.
- 5. Blood tests include the measurement of cholesterol, Testosterone, glucose tolerance, and glucose levels during fasting and after eating.



There is no definitive cure for polycystic ovary syndrome; however, therapeutic measures aim to manage symptoms, prevent complications, and control their severity. The treatment of PCOS consists of two major components:

- Modify lifestyle and diet.
- > .Pharmaceuticals.

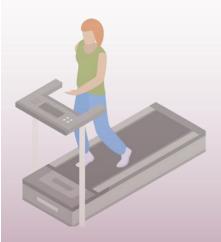
Small holes are sometimes created in the ovaries using a laser or a thin needle to restore normal ovulation and increase fertility. There is the option of cautery treatment in some cases, rarely used treatment.



Non-pharmacological PCOS treatment

Patients with PCOS are advised to follow a healthy lifestyle, including the following:

- ➤ Shedding pounds and adhering to a low-carbohydrate diet. Losing 5 to 10 percent of body weight can help alleviate symptoms, especially in obese patients.
- Playing sports



Medications used to treat polycystic ovary syndrome

Certain medications are prescribed for the treatment of particular symptoms or complications. Examples of such drugs include:

- 1. Contraceptive pills: Birth control pills containing a combination of synthetic estrogen and progesterone hormones help reduce the level of androgens, thereby regulating the menstrual cycle and treating PCOS symptoms such as hair growth and acne, as well as reducing the risk of endometrial cancer and abnormal bleeding.
- 2. In vitro fertilization (IVF) is recommended for the treatment of infertility caused by polycystic ovary syndrome (PCOS) due to its high success rate and potentially lower rate of multiple pregnancies if properly managed.



- 3. Metformin is a drug used to treat type 2 diabetes, and it is also used to treat polycystic ovary syndrome in order to reduce the insulin resistance associated with this condition.
- 4. Clomiphene, a fertility drug that stimulates ovulation, aids in the treatment of pregnancy problems caused by polycystic ovary syndrome and may also increase the likelihood of conceiving twins.
- 5. In reducing coarse and excessive hair, Spironolactone is effective.
- 6. This medication, such as Eflornithine cream, slows hair growth and is used to reduce unwanted hair growth



Sources and references:

All images used are from canva.com

Review and audit:

The content of this booklet has been reviewed by consultant obstetricians and gynecologists at King Fahd University Hospital.

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