

Female reproductive system diseases

Polycystic ovary syndrome

Introduction:

Polycystic ovary syndrome is one of the most common hormonal disorders among women. The name of this condition comes from the cysts that develop when ovulation vesicles get trapped under the surface of the ovaries preventing them from releasing the eggs.

Cause:

Normally, the pituitary gland in the brain secretes hormones (FSH) and (LH), that are responsible for controlling ovulation, while the ovary secretes estrogen and progesterone hormones, which prepare the uterus for the egg. The ovary also secretes the male hormone (androgen).

However, in the case of polycystic ovary syndrome, the pituitary gland secretes excess amounts of (LH) and the ovary secretes excess amounts of the male hormone (androgen), resulting in irregular menstrual cycles and difficulties conceiving, as well as an increase facial hair and acne. There are many factors that may play a role in causing polycystic ovary syndrome:

- Increased resistance to insulin (high blood glucose levels).
- Heredity

Symptoms:

- Menstrual cycle abnormalities: The duration of the menstrual cycle may be prolonged to 35 days, or it could become less frequent occurring less than 8 times a year or it could be completely absent.
- Increased body and facial hair
- Acne
- Obesity
- Difficulty conceiving

Diagnosis:

- **Medical history:** Absence of the menstrual cycle - increased facial and body hair - acne - excess weight.
- **Ultrasound examination:** of the uterus and ovaries
- **Blood test:** To measure hormone levels, especially androgens and (LH).

Treatment:

Treatment depends on the symptoms regardless of whether the woman wants to conceive or not:

- **Lifestyle changes:** This includes following a low-carb diet that is rich in grains, vegetables, fruits and small amounts of meat. This helps reduce blood sugar levels and adjusts insulin levels in the body.
- **Birth Control Pills (Oral Contraceptives):** This treatment is prescribed to women who do not wish to conceive. These pills help regulate the menstrual cycle, reduce the secretion level of the male hormone (androgen) and reduce skin changes and acne.
- **Taking diabetes medication:** Such as Glucophage, which is used to treat type 2 diabetes. This medication regulates insulin which reduces the secretion of androgens, thus reducing excessive hair growth, triggers ovulation, reduces weight and adjusts the level of cholesterol in the blood.
- **Fertility drugs:** Lack of ovulation is one of the main problems facing women who suffer from polycystic ovary syndrome. Drugs that stimulate ovulation are used after other causes of infertility in both the man and the woman are excluded.
- **Surgery:** Ovarian drilling is a laparoscopic surgical procedure used when women do not respond to fertility drugs. The procedure is done by using laser or electrocautery to destroy the membranes surrounding the ovaries in order to stimulate ovulation by reducing androgen levels.

Complications:

According to recent studies, when women with polycystic ovary syndrome do not adhere to the recommended treatment plan, many other medical issues may develop, including:

- More than 50% of women develop type 2 diabetes before age 40.
- Risk of developing heart disease
- Risk of developing high blood pressure.
- High levels of bad cholesterol in the blood and low levels of good cholesterol in the blood.
- Risk of developing sleep apnea.
- Fatty liver disease.

How to prevent further complications and side effects?

- Adhering to the doctor's instructions and taking the necessary medications
- Healthy food
- Exercise.
- Staying away from smoking.
- Regularly checking blood pressure, cholesterol and sugar levels.

Clinical Health Education Department

For more information, please contact us by email on:

Hpromotion@moh.gov.sa