

Polycystic Ovary Syndrome (PCOS)

What are common signs and symptoms of polycystic ovary syndrome (PCOS)?

Common PCOS signs and symptoms include the following:

- ❖ Irregular menstrual periods—Menstrual disorders can include absent periods, periods that occur infrequently or too frequently, heavy periods, or unpredictable periods.
- ❖ Infertility—PCOS is one of the most common causes of female infertility.
- ❖ Obesity—Up to 80% of women with PCOS are obese.
- ❖ Excess hair growth on the face, chest, abdomen, or upper thighs—This condition, called hirsutism, affects more than 70% of women with PCOS.
- ❖ Severe acne or acne that occurs after adolescence and does not respond to usual treatments
- ❖ Oily skin
- ❖ Patches of thickened, velvety, darkened skin called acanthosis nigricans
- ❖ Multiple small cysts on the ovaries

What causes PCOS?

Although the cause of PCOS is not known, it appears that PCOS may be related to many different factors working together. These factors include

- insulin resistance,
- increased levels of hormones called androgens,
- an irregular menstrual cycle.

What is insulin resistance?

Insulin resistance is a condition in which the body's cells do not respond to the effects of insulin. When the body does not respond to insulin,

- the level of glucose in the blood increases.
- This may cause more insulin to be produced as the body tries to move glucose into cells.
- Insulin resistance can lead to diabetes mellitus.
- It also is associated with acanthosis nigricans.

What can high levels of androgens lead to?

When higher than normal levels of androgens are produced,

- the ovaries may be prevented from releasing an egg each month (a process called ovulation).
- High androgen levels also cause the unwanted hair growth and acne seen in many women with PCOS.

What can irregular menstrual periods lead to?

Irregular menstrual periods can lead to

- infertility
- in some women, the development of numerous small cysts on the ovaries.

What are the health risks for women with PCOS?

PCOS affects all areas of the body, not just the reproductive system.

- It increases a woman's risk of serious conditions that may have lifelong consequences.
- Insulin resistance increases the risk of type 2 diabetes mellitus and cardiovascular disease.
- Another condition that is associated with PCOS is metabolic syndrome. This syndrome contributes to both diabetes and heart disease.
- Women with PCOS tend to have a condition called endometrial hyperplasia, in which the lining of the uterus (the endometrium) becomes too thick. This condition increases the risk of endometrial cancer.

Are treatments available for women with PCOS?

A variety of treatments are available to address the problems of PCOS.

Treatment is tailored to each woman according to symptoms, other health problems, and whether she wants to become pregnant.

How can combined hormonal birth control pills be used to treat women with PCOS?

Combined hormonal birth control pills can be used for long-term treatment in women with PCOS who do not wish to become pregnant.

- Combined hormonal pills contain both estrogen and progestin.
- These birth control pills regulate the menstrual cycle
- reduce hirsutism and acne by decreasing androgen levels.
- They also decrease the risk of endometrial cancer.

What effect can weight loss have on women with PCOS?

For overweight women, weight loss alone often regulates the menstrual cycle.

- Even a small weight loss of 10–15 pounds can be helpful in making menstrual

periods more regular.

- Weight loss also has been found to improve cholesterol and insulin levels and relieve symptoms such as excess hair growth and acne.

How can insulin-sensitizing drugs help treat women with PCOS?

Insulin-sensitizing drugs used to treat diabetes frequently are used in the treatment of PCOS.

- These drugs help the body respond to insulin.
- In women with PCOS, they can help decrease androgen levels and improve ovulation.
- Restoring ovulation helps make menstrual periods regular and more predictable.

What can be done to increase the chances of pregnancy for women with PCOS?

Successful ovulation is the first step toward pregnancy.

- For overweight women, weight loss often accomplishes this goal.
- Medications also may be used to cause ovulation.
- Surgery on the ovaries has been used when other treatments do not work. However, the long-term effects of these procedures are not clear.