

Polycystic Ovary Syndrome

Polycystic ovary syndrome (PCOS) is a disorder that occurs when levels of certain hormones are abnormal. Women with PCOS may have irregular or no menstrual periods, infertility, and excess hair growth. PCOS also can cause long-term health problems in women, but it can be treated. This pamphlet will explain:

- What is PCOS
- How it is diagnosed
- How PCOS can be treated

With proper treatment, PCOS can be managed and your symptoms can be relieved.

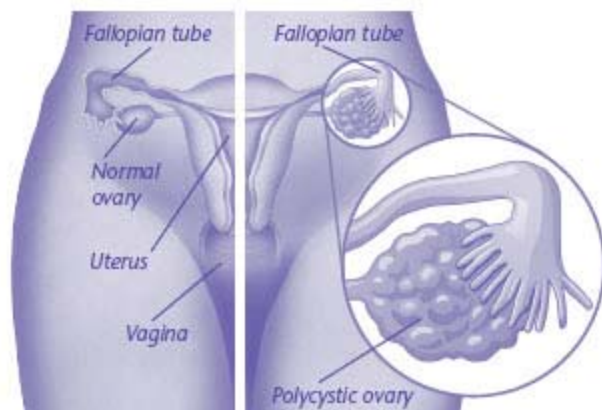
Signs and Symptoms

Women with PCOS have a history of irregular menstrual bleeding and often have difficulty getting pregnant. They also may have unwanted hair growth in places such as on the face (mainly on the upper lip and chin), between their breasts, in the lower part of the abdomen, and on the inner thighs. In severe cases, PCOS can lead to balding, lowering of the voice, and bigger muscles.

Many women with PCOS produce too much *insulin* or the insulin they produce does not work as it should. This is one reason why women with PCOS tend to gain weight or have a hard time losing weight. They also have an increased risk of diabetes (a condition in which the levels of sugar in the blood are too high), high blood pressure, and heart disease.

Causes

Each month an egg matures in a woman's ovary. The egg is surrounded by a sac called a *follicle*. The cells of the follicle first produce the hormone *estrogen*. The egg is then released (ovulation), and the follicle cells begin to produce *progesterone* as well as estrogen.



Unlike women with normal ovaries (left), women with PCOS may have enlarged ovaries that contain many small cysts (right).

Women with PCOS produce an excess amount of male sex hormones called *androgens*. All women produce a certain amount of these hormones. When too much is produced, it can prevent ovulation. This can result in infertility. Too much androgen also can result in excess hair growth and irregular bleeding.

Diagnosis

Women who are not ovulating and have signs of androgen excess are considered to have PCOS. The diagnosis is based on a medical history, physical exam, and lab tests. Your doctor will ask you about your health, your menstrual cycle, and any unwanted hair growth. During a complete physical exam your doctor will look for signs of androgen excess and measure your blood pressure. He or she also may measure your waist, hips, height, and weight. Blood tests may be done to look for signs of diabetes or to check the levels of hormones or other substances.

An *ultrasound* exam may be done to look for small cysts on the ovary. These cysts often occur with PCOS.

Treatment

PCOS is a lifelong condition, but it can be treated in a number of ways. Treatment depends on the symptoms and whether a woman wants to become pregnant. Long-term treatment may be needed to help prevent endometrial cancer, diabetes, and heart disease.

Lifestyle Changes

Daily exercise improves the body's use of insulin and can help relieve symptoms of PCOS. Many of the symptoms of PCOS may be improved by daily exercise for at least 30 minutes a day.

In some women with PCOS, weight loss will lower insulin levels enough to allow ovulation to begin. It also may help slow new hair growth. Talk to your doctor or a nutritionist for advice on how to lose weight.

Medication



Your doctor may prescribe progesterone (or other hormones) or birth control pills to bring on regular menstrual bleeding. Women who wish to become pregnant may be given medications to help them ovulate. Some women with PCOS will be prescribed medication to lower their insulin levels.

Your doctor also may prescribe birth control pills and other medications to help slow the growth of new body hair. It may take a number of months for you to

notice any results. These medications likely will not remove hair that is already there. Unwanted hair can be removed by shaving, electrolysis, or other hair removal methods.

If needed, other medications may be used to treat diabetes, high blood pressure, and high cholesterol levels.

Finally...

With proper treatment, PCOS can be managed and your symptoms can be relieved. You should have long-term health care to look for disorders that may arise. If you have PCOS, changes in your lifestyle will improve your health.

Glossary

Androgens: Any steroid hormones, produced by the adrenal gland or by the ovaries, that promote male characteristics, such as a beard and deepening voice.

Estrogen: A female hormone produced in the ovaries.

Follicle: The saclike structure that forms inside an ovary when an egg is produced.

Hormones: Substances produced by the body to control the functions of various organs.

Insulin: A hormone that lowers the levels of glucose (sugar) in the blood.

Ovary: One of two glands, located on either side of the uterus, that contain the eggs released at ovulation and that produce hormones.

Progesterone: A female hormone that is produced in the ovaries and that prepares the lining of the uterus for pregnancy.

Ultrasound: A test in which sound waves are used to examine internal structures.