

## Polycystic Ovary Syndrome

### Concept

It is a disorder of the hypothalamic-pituitary-ovarian system, giving rise to temporary anovulation and androgen excess. It is characterized by menstrual irregularities ranging from amenorrhea to dysfunctional uterine bleeding.

It is health problem that affects one in 10 women of childbearing age. Women with PCOS have a hormonal imbalance and metabolism problems that may affect their overall health and appearance.

### Symptoms

- **Irregular menstrual cycle.** Women with PCOS may miss periods or have fewer periods (fewer than eight in a year). Or, their periods may come every 21 days or more often. Some women with PCOS stop having menstrual periods.
- **Too much hair** on the face, chin, or parts of the body where men usually have hair. This is called “hirsutism.” Hirsutism affects up to 70 percent of women with PCOS.
- **Acne** on the face, chest, and upper back
- **Thinning hair** or hair loss on the scalp; male- pattern baldness
- **Weight gain** or difficulty losing weight
- **Darkening** of skin, particularly along neck creases, in the groin, and underneath breasts
- **Skin tags**, which are small flaps of excess skin in the armpits or neck area

### Causes

- **High levels of androgens.** Higher than normal androgen levels in women can prevent the ovaries from releasing an egg (ovulation) during each menstrual cycle, and can cause extra hair growth and acne.

- **High levels of insulin.** Insulin is a hormone that controls how the food you eat is changed into energy. Insulin resistance is when the body's cells do not respond normally to insulin. As a result, your insulin blood levels become higher than normal. Many women with PCOS have insulin resistance, especially those who are overweight or obese, have unhealthy eating habits, do not get enough physical activity, and have a family history of diabetes (usually type 2 diabetes). Over time, insulin resistance can lead to type 2 diabetes.

## Treatment

- **Weight loss.** Losing weight may help to lower your blood glucose levels, improve the way your body uses insulin, and help your hormones reach normal levels. Even a 10 percent loss in body weight (for example, a 150-pound woman losing 15 pounds) can help make your menstrual cycle more regular and improve your chances of getting pregnant.
- **Hair removal or slowing hair growth.** To try facial hair removal creams, laser hair removal, or electrolysis to remove excess hair. A prescription skin treatment (eflornithine HCl cream) can slow down the growth rate of new hair in unwanted places.
- **Prescription medicines.** Your doctor may prescribe hormonal birth control, such as the pill, patch, shot, vaginal ring, or hormonal intrauterine device (IUD), to improve acne and reduce unwanted hair. Other medicines can block the effect of androgens or lower insulin and androgen levels. If you are trying to get pregnant, your doctor may prescribe medicine to help you ovulate, such as clomiphene (Clomid).
- **In vitro fertilization (IVF).** In IVF, your egg is fertilized with your partner's sperm in a laboratory and then placed in your uterus to implant and develop. Compared with medicine alone, IVF results in higher pregnancy rates and lowers your risk for twins and triplets (by allowing your doctor to transfer a single fertilized egg into your uterus).
- **Surgery.** The outer shell (called the cortex) of ovaries is thickened in women with PCOS and thought to play a role in preventing spontaneous ovulation. Ovarian drilling is a surgery in which the doctor makes a few holes in the surface of your ovary using lasers or

a fine needle heated with electricity. Surgery usually restores ovulation, but only for six to eight months.