

## Understanding Polycystic Ovary Syndrome

### What is polycystic ovary syndrome?

Polycystic ovary syndrome (PCOS) is a disorder where a woman's hormones are not in balance, usually resulting in higher levels of androgens ("male" hormones) in her system. Its name comes from the fact that some women with PCOS have enlarged ovaries, with many fluid-filled cysts. The ovaries are two organs in the pelvis that make hormones and eggs. Eggs develop and grow in the ovaries until they are released (ovulation). Ovarian cysts can form when egg-containing cysts in the ovary grow but do not release the egg. These small cysts are not harmful—they are *not* cancer and do not need to be removed.

### How common is PCOS?

About 5% to 10% of adolescent girls and women have PCOS. In the United States, the condition may affect as many as 4 million women.

### What are the symptoms?

Women with PCOS may have a number of symptoms. Many are first noticed during teenage years, soon after women begin getting their periods. The features of PCOS are different from woman to woman, but may include any or all of the following:

- Less frequent or no menstrual periods and/or irregular bleeding.
- Less frequent or no ovulation (releasing an egg), which can lead to difficulty becoming pregnant.
- Excess growth of hair (hirsutism) on the face, chest, abdomen, back, or pubic area.
- Acne or oily skin.
- Weight gain or obesity, especially in the waist area.
- Patches of thickened and dark brown or black skin on the neck, groin, underarms, or skin folds.
- Resistance to insulin

#### Less common features include:

- Thinning hair or male-pattern baldness.
- Skin tags or tiny excess flaps of skin in the armpits or neck area.
- Abnormal lipid levels, such as high total cholesterol and low HDL ("good") cholesterol.
- High blood pressure (above 140/90 mmHg).
- Diabetes.

### What causes PCOS?

No one knows for sure. PCOS runs in families, and researchers are studying whether specific genes are related to the condition. PCOS is more common in women who are obese and who have high insulin levels.

### How is it diagnosed?

Diagnosing PCOS involves several steps. First, a clinician will take a detailed medical history about the woman's menstrual cycle and reproductive events and perform a physical exam. Second, if the clinician suspects PCOS, he or she may recommend a pelvic ultrasound (a test that uses sound waves to create a picture of the ovaries) or blood tests to measure hormone levels.

### **How is PCOS treated?**

Although no cure exists, PCOS can be treated in several ways, often with excellent results. Clinicians often prescribe the birth control pill to reduce PCOS symptoms. Birth control pills help make menstrual periods more regular, reduce male hormone levels to normal, help clear acne, and usually slow the growth of excess hair and make it lighter and less coarse. Birth control pills also protect against cancer of the uterus, which may be a long-term health consequence of untreated PCOS.

Special medicines, such as those that make the body more sensitive to insulin, and lifestyle changes also may help reduce symptoms. Topical treatments can help reduce acne. Excess hair can be treated with medicines, bleaching, waxing, shaving, hair removal creams, electrolysis (use of small amounts of electric current to remove hair), or laser therapy. Regular exercise and a low-calorie diet also can help restore a healthy weight and reduce the symptoms of PCOS.

For women with PCOS who are having trouble becoming pregnant, medicines are available to help cause ovulation, restore normal menstrual cycles, and improve the chances of pregnancy. For more information about PCOS and available treatments, speak with your clinician.

### **For More Information**

- **American College of Obstetricians and Gynecologists (ACOG)**  
1-800-410-ACOG (2264)  
<http://www.acog.org>
- **Center for Young Women's Health  
Boston Children's Hospital**  
1-617-355-2994  
<http://www.youngwomenshealth.org/pcosinfo.html>
- **Hormone Foundation**  
1-800-HORMONE (467-6663)  
<http://www.hormone.org>
- **International Council on Infertility Information Dissemination**  
1-703-379-9178  
<http://www.inciid.org>
- **National Women's Health Information Center**  
1-800-994-9662  
<http://www.4woman.gov>
- **Polycystic Ovarian Syndrome Association (PCOSA)**  
1-877-775-PCOS (7267)  
<http://www.pcosupport.org>  
<http://www.pcoteen.org>  
(PCOSA's teen-oriented website)