

UAB Health Education

STUDENT HEALTH SERVICES

POLYCYSTIC OVARIAN SYNDROME (PCOS)



Polycystic ovarian syndrome is caused by an imbalance of reproductive hormones. The hormonal imbalance causes problems with the release of an egg from the ovary as part of the menstrual cycle. It is common among women of reproductive age and can cause cysts to form on the ovary and irregular periods. Because it causes irregular menstrual periods, PCOS is a common cause of infertility. Long-standing PCOS can also increase the risk of cancer of the uterine lining (endometrial cancer). The exact cause of PCOS is unknown, but it is thought to be due to one of two factors:

- **High levels of androgens:** Androgens are considered “male hormones,” but are naturally present in low levels in females. Women with PCOS have higher levels of androgens than normal, which can prevent the release of the egg during the menstrual cycle and cause excess hair growth and acne.
- **High levels of insulin:** Many women with PCOS also develop insulin resistance, meaning that their body develops high levels of insulin that is unable to function as it should to control how your food is changed into energy. High insulin levels are especially common in women with PCOS who are overweight or obese, have unhealthy eating and exercise habits or have a family history of diabetes.

DIAGNOSIS

Your provider will take a detailed history about your menstrual periods and symptoms. They will then do a full physical exam, likely including a pelvic exam. They will also order blood tests to check hormone levels as well as your blood sugar and lipids. Your provider may also order an ultrasound, which uses sound waves to look at your reproductive organs. In women with PCOS the ovaries may be slightly enlarged, with multiple small cysts.

TREATMENT

- **Lifestyle modification:** The most important factor in managing PCOS involves maintaining a healthy lifestyle by healthy eating habits and daily exercise.
- **Hormonal birth control:** The most common medical treatment for PCOS is hormonal birth control in the form of the pill, patch, shot, vaginal ring, implant or intrauterine device. Hormonal birth control can make your period more regular, help improve acne and unwanted hair growth and reduce your risk of endometrial cancer.
- **Metformin:** Metformin is used to lower the insulin level. It is particularly used in those with diabetes or pre-diabetes. It may also help with weight loss.
- **Anti-androgen medications:** These work by blocking excess androgens. They can decrease acne, unwanted hair growth and scalp hair loss.
- **In women with PCOS who desire pregnancy:** Women with PCOS can get pregnant. If you are overweight, losing weight through healthy eating and exercise can help regulate your menstrual cycle. Your provider may also prescribe a medicine to help you ovulate such as clomifazole, or you may consider in-vitro fertilization (IVF).
- **Ask your provider** about other treatment options for unwanted hair growth, acne and for formulating a weight loss plan.

RESOURCES

Women's Health.gov <https://www.womenshealth.gov/a-z-topics/polycystic-ovary-syndrome>

Young Women's Health.org <https://youngwomenshealth.org/pcos-all-guides/#polycystic-ovary-syndrome>

FamilyDoctor.org <https://familydoctor.org/condition/polycystic-ovary-syndrome/>

Mayo Clinic <https://www.mayoclinic.org/diseases-conditions/pcos/symptoms-causes/syc-20353439>

SYMPTOMS

- Irregular periods occurring every few months, not at all or too frequently
- Extra hair on the face or other parts of the body, called hirsutism
- Acne on the face, chest and back
- Weight gain or difficulty losing weight
- Darkening of skin, especially along neck creases, in groin, and underneath breasts, called acanthosis nigricans

RISK FACTORS

- Family history of PCOS
- Overweight, obesity



STUDENT HEALTH SERVICES

The University of Alabama at Birmingham

Clinic: 205-934-3580

After Hours: 205-934-3411

<https://www.uab.edu/students/health/>

Last Updated 08/2020