

What You Should Know About Polycystic Ovary Syndrome

If you've ever consulted a health care provider or done any reading about irregular periods, excess body hair, or infertility, you may have heard or read about polycystic ovary syndrome (PCOS).

What is PCOS?

Polycystic ovary syndrome is a set of endocrine (hormonal) problems that affect 5 to 10 of every 100 women of childbearing age (ages 20 to 40 years-old). Anovulation (when the ovaries don't release eggs) and infertility (the inability to become pregnant after 6 to 12 months of unprotected intercourse) are one part of the picture. High male hormone (androgen) levels are another part. Abnormally high cholesterol and triglycerides and high blood pressure occur frequently in women with PCOS. They are also more likely to be very overweight and have one or more close family members with diabetes. Their bodies may not be able to produce or use insulin properly, a condition called insulin resistance, which may lead to diabetes. In fact, women with PCOS are 3 to 7 times more likely than those without it to develop diabetes. When any two of the following three problems are present without any other explanation, your health care provider can diagnose PCOS:

Irregular periods/Lack of ovulation.

—Most women ovulate about every 28 days, or 13 times a year. If they don't become pregnant, they have a period about 2 weeks later. Women with PCOS don't ovulate, or ovulate infrequently, so they usually have 8 or fewer periods a year. Sometimes health care providers suggest that women with irregular periods take oral contraceptives (OCs). Women with PCOS who take OCs have regular bleeding at the end of each pill pack, but this is not the same as having a monthly period because you ovulated and did not become pregnant.

Too much androgen.—Excessive male hormones, primarily testosterone, can cause acne and thick, dark hair in unexpected places, such as the upper lip, chin, chest, back, and stomach. However, race, ethnicity, and family traits all influence how much body hair you have, so some women with PCOS have very little and some women without PCOS have an excess of body hair.

Androgens can also cause oily skin, dandruff, thinning hair, and weight gain, especially around the abdomen.

Cysts in the ovaries.—The condition of PCOS got its name from what doctors noticed first: ovaries with many cysts (polycystic ovaries). Your health care provider can sometimes feel ovari-

an cysts during a routine pelvic examination, when he or she inserts two fingers inside your vagina and presses on the lower part of your stomach to outline the uterus and ovaries. Normal ovaries are smooth and about the size and shape of an almond. Cysts make the ovaries feel lumpy and larger than usual, about 1½ to 3 times their normal size.

Diagnosing PCOS

Like any medical condition, the first step in checking for PCOS is to see your health care provider. He or she will take a health history, including questions about your general health and family history. Specific questions about your monthly periods will include the age when you first started having them, how often they come, how long they last, and if you ever have any bleeding or spotting in between periods. You can be prepared for these questions by keeping a menstrual diary before your visit. Using a calendar or datebook, mark the days when you have your period, or record the information in a notebook.

The physical examination will include checking your height, weight, blood pressure, performing a pelvic exam, and, possibly taking a measurement of your waist circumference. Some of the tests that may be ordered are:

- A pelvic ultrasound to check the ovaries for cysts. The ultrasound may be done either by placing a probe on your lower stomach when your bladder is full, or with a probe inserted inside the vagina, like a speculum during a regular pelvic exam. Either method can be a little uncomfortable, but should not be painful.

This Patient Handout was prepared by Diane E. Judge, APN, CNP, using materials from the Polycystic Ovarian Syndrome Association (<http://www.pcosupport.org>) and The National Women's Health Information Center (<http://www.4woman.gov>).

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- Blood tests to check hormone levels. Levels of the female hormone estrogen are usually normal in women with PCOS. However, androgen levels are high and progesterone levels, which are produced during and after ovulation, are low in women with this condition. Hormonal blood tests can help determine if you have PCOS or if other hormone abnormalities are causing your symptoms.
- Blood test to check cholesterol and triglyceride levels. Since triglycerides go up after you eat, this test should be done after you have been fasting for 12 hours.
- Blood sugar test to check for diabetes. Because of the association between PCOS and diabetes, women with PCOS should have their blood sugar levels tested regularly. Early detection of diabetes is particularly important if you are thinking about becoming pregnant. Identifying and controlling diabetes before or in early pregnancy can prevent serious problems for the baby.

Treating PCOS

Treatment for PCOS depends on the problems you are having and whether or not you are trying to get pregnant. Here are some of the treatments for specific problems:

Irregular periods.—If you are not trying to get pregnant and need a method of birth control, OCs will regulate your periods. In addition, women who produce estrogen but who do not ovulate regularly—as happens in PCOS—may be more likely to develop cancer of the uterine lining. This is thought to result from many years of having estrogen stimulate the lining without any progesterone to counteract it and make it shed. Oral contraceptives, which contain both estrogen and a form of progesterone, lower the risk of this form of cancer. Women who do not need contraception or who do not

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want to take OCs can take a pill containing only progesterone for a few days each month or so, causing the uterine lining to shed.

Androgen effects.—Most types of OCs improve acne and some may also decrease troublesome body hair. Specific prescription medications, either applied directly to the skin or taken by mouth, are also effective in treating acne. Oral medication is available to treat excessive body hair. Some women, however, prefer to shave the hair or undergo electrolysis or laser treatment.

Infertility.—Because most women with PCOS do not ovulate—or do so rarely—infertility is common. However, women with PCOS should not rely on this condition as a method of birth control if they really don't want to get pregnant. If you are trying to get pregnant, your ovaries may be “persuaded” to release an egg when you take a prescription fertility drug called clomiphene citrate. This medication is taken orally for several days early in your menstrual cycle—or, if you aren't having periods, it is taken after you use progesterone to induce a period. Most women with PCOS will ovulate after taking clomiphene citrate, but not all will become pregnant. If you do not become pregnant, other ovulation-inducing hormones or treatments can be used. Research is being done on new medications to help women with PCOS-related infertility become pregnant, and is showing some promising results.

Obesity.—For some women, losing weight improves PCOS, in addition to lowering the risk of developing diabetes, high blood pressure, and high cholesterol. A professional nutritionist, support groups and/or weight loss and exercise partners can be helpful with weight loss.

High cholesterol and high blood pressure.—If cholesterol and blood pressure do not decrease with healthy eating habits and exercise, effective medications are available.

Insulin resistance.—Some research projects have found that medication to treat insulin resistance prevents or slows the development of diabetes and may restore ovulation, normal periods, and the ability to become pregnant.

Depression and sexuality issues.—A recent study found that women with PCOS were less satisfied with their sex lives and with their lives in general. If you are having problems with sleep and appetite, are feeling sad for no reason, are not enjoying usually pleasurable activities, or are dissatisfied with your sex life, let your health care provider know. He or she should be able to offer or refer you for counseling and treatment.

Resources

Polycystic Ovarian Syndrome Association, Inc.

877-775-PCOS
<http://www.pcosupport.org>

International Council on Infertility Information Dissemination

520-544-9548 or 703-379-9178
<http://www.inciid.org>

The National Women's Health Information Center

800-994-WOMAN
<http://www.4woman.gov>