Fertility Info

Polycystic Ovary Syndrome (PCOS)

What You Need to Know

City Fertility Centre
your partners in life

Polycystic Ovary Syndrome (PCOS)

Polycystic Ovary Syndrome (PCOS) is the name given to the condition in which women with polycystic ovaries have an associated hormonal imbalance within the ovaries. PCOS also describes the appearance of the ovaries when they are seen on an ultrasound (cyst-like). PCOS is the most common reproductive endocrine disorder among women of reproductive age, affecting about five per cent.

What causes it?

Normally the ovaries produce estrogen, progesterone and testosterone. In PCOS, estrogen is usually produced in normal amounts, testosterone (androgens) is produced in excessive amounts and progesterone, which is released after ovulation (the release of the egg from the follicle), may be produced irregularly or not at all. It is still unclear what causes PCOS. While it is not curable, there are several approaches to achieving hormonal balance.

What are the signs and symptoms of PCOS?

Women who have PCOS may experience the following:

- An irregular or absent menstrual cycle.
- Infertility due to lack of ovulation.
- Hirsutism (excessive hair).
- Acne and weight gain (disproportionate to kilojoules intake).

PCOS patients are noted to have a higher than normal miscarriage rate if they become pregnant. Seventy-five per cent of women with repeated miscarriages are reported to have PCOS. Women who have a Body Mass Index (BMI) of more than 29 will take longer to conceive (normal BMI ranges from 20-25). Other related symptoms may include:

- mood swings
- breast and abdominal pain
- aching joints
- dizziness
- chronic fatigue-like signs

A lack of ovulation in women with PCOS results in continuous exposure of the uterine lining to estrogen. This may cause excessive thickening of the endometrial lining of the uterus and result in heavy, irregular bleeding. The incidence of uterine cancer may be increased due to years of continuous stimulation of the endometrium by estrogen, unopposed to progesterone. Women with PCOS may be at increased risk of developing the Metabolic Syndrome, which is characterised by abdominal obesity, cholesterol abnormalities, hypertension and insulin resistance that impairs blood sugar regulation. Women with PCOS have an increased risk of developing non-insulin-dependent (Type 2) diabetes and possibly heart disease.

How is PCOS diagnosed?

Diagnosis is made by a careful medical history examination, ultrasound of the ovaries (noted to contain many cysts) and measuring hormone levels, including:

- Testosterone (usually elevated).
- Sex Hormone Binding Globulin (SHBG), Free Androgen Index (FAI) and Dehydroepiandrosterone Sulfate (DHEAS), to see whether increased androgens are primarily from the ovaries or the adrenal gland.
- Follicle Stimulating Hormone (FSH) (normal or low) and Luteinising Hormone (LH) (usually two to three times higher than FSH levels).
- Diabetes and insulin resistance testing.
- Cholesterol.
- Prolactin (to rule out pituitary-associated causes).
- Thyroid function test: low levels of thyroid hormones can lead to symptoms that mimic PCOS.
- Raised homocysteine levels: an independent cardiovascular risk factor has been noted in women with PCOS.

If the ultrasound and the blood tests are normal, it does not necessarily mean the woman does not have PCOS.

What are the treatment options?

Treatment depends on the presenting problem you are concerned with.

If fertility is your main goal: treatment with medication such as metformin can increase the body's sensitivity to insulin, leading to regular ovulation. Ovulation may also be induced with clomiphene citrate (Clomid or Serophene), an orally administered fertility drug. Ovulation can be induced in up to eighty per cent of women using clomiphene, with subsequent pregnancy rates comparable to the general population (about 20-25 per cent of healthy fertile couples become pregnant each month they try).

Clomiphene is usually only prescribed by your specialist for up to six menstrual cycles. If the woman does not become pregnant, injectable fertility drugs (such as FSH), administered at low doses, may be used to induce ovulation. The aim of these drugs is to produce only one mature egg, similar to a natural menstrual cycle. FSH injections, however, are associated with a greater chance of multiple pregnancy and side effects.

Sometimes IVF is offered to women who have PCOS and for whom other treatments have failed. Ovarian drilling or diathermy, which has been used to treat women with PCOS, is a minimally invasive operation performed through a laparoscope. The ovaries are "drilled" or cauterised. This procedure has been shown to induce ovulation in some women with PCOS. As an alternative to IVF, ovarian drilling or diathermy may be used to induce ovulation in women who may not have responded to oral or injectable fertility drugs.

Obesity is common in women with PCOS. Weight loss as a result of a healthy diet and exercise has been shown to improve the frequency of ovulation, boosting fertility and lowering the risk of associated problems common to PCOS, such as diabetes. Women who have a Body Mass Index (BMI) above 29 and are not ovulating will increase their chances of conception if they lose weight. Overweight women are also noted to have a higher miscarriage rate.

Prophylactic B-group vitamins have been noted to reduce homocysteine levels, implicated in cardiovascular disease in women with PCOS. If you would like further guidance regarding your diet, an appointment to see a qualified dietitian at City Fertility Centre can be arranged for you. Please contact the fertility coordinator for more information on this service.

If infertility is not your immediate concern: the oral contraceptive pill can be prescribed to reduce acne and hirsutism and maintain regular menstrual periods.

Where to Now?

I want more information

- Contact our Fertility Advice Team or
- Book a 15-minute nurse chat

I'm ready to take the next step

- Get a referral from your GP, to one of our accredited specialists to book a fertility health check
- Book an appointment with us

New fertility patient referrals are guaranteed an appointment within 10 working days with the first available specialist.

Contact Us

Call 1300 354 354
Email contactus@cityfertility.com.au
Visit cityfertility.com.au

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