



Keyfacts - Polycystic ovary syndrome (PCOS)

Women's health portal web resource

What is polycystic ovary syndrome (PCOS)?

PCOS is a condition related to the body's hormones which can affect physical and emotional health.

Hormones are chemical messengers that tell the body what to do (e.g. when to release an egg from the ovaries or when to start a period/monthly).

PCOS affects 12-18% of Australian women of reproductive age and maybe as high as 21% of Aboriginal and Torres Strait Islander women.

What causes polycystic ovary syndrome (PCOS)?

The cause of PCOS is probably a combination of:

- family history
- lifestyle (for example, diet and physical activity). PCOS is more common with increased weight
- hormonal imbalances.

How does polycystic ovary syndrome (PCOS) affect the body?

All women have male-type hormones in their body in small amounts, in women with PCOS there may be more of these male type hormones. There is also often a change in insulin (a hormone that helps the body take up glucose). When the hormones are out of balance this can change or upset the messages that are sent to different parts of the body.

In PCOS these changes can cause some of the following:

- period problems
- emotional problems
- hair growth on the face and other areas
- acne or pimples
- easy weight gain
- insulin resistance or type 2 diabetes
- high cholesterol
- delays/difficulties getting pregnant.

The symptoms vary between different women and can change as a woman ages.

How is polycystic ovary syndrome (PCOS) diagnosed?

To diagnose PCOS, a doctor takes a medical history asking about:

- periods
- hair growth
- weight gain.

A medical examination includes:

- measuring weight
- measuring height
- measuring Body Mass Index (BMI) (weight/height²)
- measuring blood pressure
- checking for hair growth.

Other tests include:

- blood tests to check for male hormone levels and other problems
- internal ultrasound of the pelvis, the ovaries and the uterus/womb.

CORE FUNDING



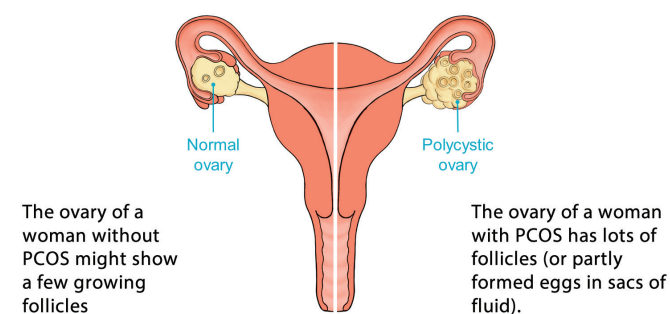
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A woman is diagnosed with PCOS if she has two or more of these:

- a blood test that shows a large amount of male hormones in the blood or there are signs of too many male hormones such as lots of hair on the face or body
- irregular periods/monthlies or no periods/monthlies
- ultrasound shows the ovaries with many follicles (partly formed eggs in sacs of fluid).

Figure 1: A normal ovary and a PCOS ovary



What is a polycystic ovary?

During a normal menstrual cycle a number of follicles start to grow. All except one will stop growing and be re-absorbed. In women without polycystic ovaries, a small number of follicles can be seen on ultrasound.

In women with polycystic ovaries, there is an excess number (> 10) of small follicles seen on ultrasound. These small follicles develop but are not re-absorbed in the same way. In women with PCOS this is due to the hormone change.

Polycystic ovaries can happen for other reasons and up to 20% of women have polycystic ovaries on ultrasound without having PCOS. It is more common in young women in the first few years after starting periods, so ultrasound is not a good investigation for PCOS in teenage women.

How is polycystic ovary syndrome (PCOS) managed?

PCOS can affect physical and emotional health. There are lots of ways for a woman herself to manage PCOS but she will also need some medical help and advice. If a woman can understand how PCOS affects the body it might help her to manage it better.

Lifestyle and weight management:

- a healthy diet and physical activity are important for managing PCOS
- being physically active gives a person more energy, it can help them feel better about themselves and reduces anxiety and depression
- losing even a little bit of weight (5 to 10 per cent) can improve periods/monthlies, make it easier to get pregnant and reduce the risk of diabetes and heart disease

- For example, if a woman weighs 85kg and she can lose just 4.5kg, it will improve her health in lots of ways.

Insulin resistance and diabetes:

Many women with PCOS have insulin resistance, this means the insulin in the body cannot keep blood sugar levels stable or normal.

To improve insulin resistance:

- healthy eating, regular physical activity and losing weight
- some women may require medication.

Irregular periods:

A woman's period or monthly usually comes every 28 days. Women with PCOS have higher levels of male hormones and insulin and this causes the period/monthly to be more irregular or stop altogether. It is important to have regular periods or monthlies. It keeps the lining inside the uterus from thickening and stops abnormal cells from developing. It is good to have at least four cycles per year. Medications like the pill, other hormone tablets (e.g. Provera) or metformin can be prescribed to help periods occur regularly.

Increased hair growth:

- increased hair growth can be treated with waxing, laser hair removal, creams and some medications such as the pill.

Acne:

- acne can be treated with creams, antibiotics, the pill and some medications.

Anxiety and depression:

Women with PCOS are more likely to experience feelings of sadness, anxiety and depression than other women. This can be due to symptoms of PCOS, including more facial and body hair, acne, weight changes and fertility problems. They can affect mood, self-esteem and how women feel about themselves. Women can talk to their doctor or health professional about mental health problems; treatments include counselling, psychology or medication.

What are the difficulties with getting pregnant that may occur with polycystic ovary syndrome (PCOS)?

In some women with PCOS the ovaries do not release an egg every month so periods/monthlies are irregular. Many women with PCOS (40%) will get pregnant without medical help but some women do have trouble becoming pregnant.

Weight loss may:

- help periods/monthlies become more regular and this will help the chance of becoming pregnant. Losing 5% of body weight can improve fertility by up to 60%
- prevent the need for medical treatment like hormone tablets (or IVF although not usually required)

- reduce the chance of developing gestational diabetes (diabetes in pregnancy) and high blood pressure in pregnancy.

If a woman has been trying to have a baby for 12 months or more, or if she is trying to get pregnant but her periods do not come very often, it is important that she talks to a doctor. The doctor will do some tests to find out why she is not becoming pregnant. If a woman is not ovulating/releasing an egg from the ovaries, there are a number of medications (taken as tablets) that can help bring back ovulation. If this treatment is not successful there are other hormonal treatments available. Sometimes surgery on the ovaries can help as can hormone injections to help ovulation. IVF is another option if pregnancy does not occur or if there are other reasons for infertility.

What else can happen to women with PCOS?

Women with PCOS can have increased risk factors for heart disease associated with:

- cholesterol levels
- type 2 diabetes
- high blood pressure.

It is important that women with PCOS have regular ongoing monitoring and health checks every 1-2 years depending on their individual needs.

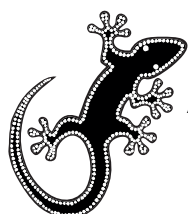
A regular health check would include asking about the regularity of periods/monthlies before menopause and measuring:

- cholesterol/lipids (blood fats)
- blood glucose (sugar)
- blood pressure
- weight.

Routine women's checks are also important including:

- Pap smears (where relevant)
- asking about contraception (where relevant)
- breast checks.

If you think a woman might have PCOS, it is important that you tell her to see a doctor or nurse. If she is diagnosed early it helps the woman to manage the condition better and can also help to prevent problems such as type 2 diabetes and high cholesterol.



Australian Indigenous HealthInfoNet

The Australian Indigenous HealthInfoNet is an innovative Internet resource that contributes to 'closing the gap' in health between Indigenous and other Australians by informing practice and policy in Indigenous health.

Two concepts underpin the HealthInfoNet's work. The first is evidence-informed decision-making, whereby practitioners and policy-makers have access to the best available research and other information. This concept is linked with that of translational research (TR), which involves making research and other information available in a form that has immediate, practical utility. Implementation of these two concepts involves synthesis, exchange and ethical application of knowledge through ongoing interaction with key stakeholders.

The HealthInfoNet's work in TR at a population-health level, in which it is at the forefront internationally, addresses the knowledge needs of a wide range of potential users, including policy-makers, health service providers, program managers, clinicians, Indigenous health workers, and other health professionals. The HealthInfoNet also provides easy-to-read and summarised material for students and the general community.

The HealthInfoNet encourages and supports information-sharing among practitioners, policy-makers and others working to improve Indigenous health – its free on line yarning places enable people across the country to share information, knowledge and experience. The HealthInfoNet is funded mainly by the Australian Department of Health and Ageing. Its award-winning web resource (www.healthinfonet.ecu.edu.au) is free and available to everyone.

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