Polycystic ovarian syndrome (PCOS)

Summary
- Polycystic ovary syndrome (PCOS) is a complex hormonal condition.
- PCOS can be associated with problems such as irregular menstrual cycles, excessive facial and body hair growth, acne, obesity, reduced fertility and increased risk of diabetes.
- PCOS can be diagnosed by taking a medical history, examination, blood tests and an ultrasound.
- Treatment for PCOS includes a healthy lifestyle, weight loss if overweight, and targeted therapy such as hormones and medication.

What is polycystic ovary syndrome (PCOS)?
Polycystic ovary syndrome (or polycystic ovarian syndrome – PCOS) is a complex hormonal condition. ‘Polycystic’ literally translates as ‘many cysts’. This refers to the many partially formed follicles on the ovaries, which each contain an egg. These rarely grow to maturity or produce eggs that can be fertilised.

Women with PCOS commonly have high levels of insulin that don’t work effectively, or male hormones known as ‘androgens’, or both. The cause is not fully understood, however family history and genetics, hormones and lifestyle play a role. Insulin resistance is present in up to four out of five women with PCOS.

Women who have a mother, aunt or sister with PCOS are 50 per cent more likely to develop PCOS. The condition is also more common in women of Asian, Aboriginal and Torres Strait Islander and African backgrounds.

PCOS is relatively common, especially in infertile women. It affects 8 to 13 per cent of women of reproductive age (between late adolescence and menopause). Almost 70 per cent of these cases remain undiagnosed.

Up to a third of women may have polycystic ovaries seen on an ultrasound, but they don’t all have PCOS. To be diagnosed with PCOS, women need to have two out of three of the following:

1. irregular or absent periods
2. acne, excess facial or body hair growth, scalp hair loss or high levels of androgens (testosterone and similar hormones) in the blood.
3. polycystic ovaries (many small cysts on the ovaries) visible on an ultrasound.

You don’t need an ultrasound if you have 1 and 2. For women aged under 20, ultrasounds are not recommended, which means 1 and 2 must be present for a diagnosis of PCOS.

Symptoms of PCOS
Women who have PCOS may experience:
- irregular menstrual cycles – periods may be less or more frequent due to less frequent ovulation (release of an egg)
- amenorrhea (no periods) – some women with PCOS do not menstruate, in some cases for many years
- excessive facial or body hair growth (or both)
- acne
- scalp hair loss
- reduced fertility (difficulty in becoming pregnant) – related to less frequent or absent ovulation
- mood changes – including anxiety and depression
- obesity
• sleep apnoea.

You don’t have to have all of these symptoms to have PCOS.

Treatment of PCOS

It is important that all the symptoms of PCOS are dealt with and managed long-term, to avoid associated health problems. PCOS is a long-term condition and long-term management is needed.

Depending on the symptoms you experience, management of PCOS can include:

• lifestyle modifications – increasing your physical activity levels and eating a healthy diet can help to manage PCOS
• weight reduction if overweight – research has shown that even five to 10 per cent weight loss can provide significant health benefits
• medical treatment – with hormones or medications.

Lifestyle modifications

Lifestyle changes – such as eating a healthy, balanced diet and introducing regular physical activity into your routine – can have a positive effect on your health in many ways. For women who have PCOS, a healthy lifestyle can improve symptoms, particularly if you are overweight and your new lifestyle helps you to lose weight.

Weight reduction

You don’t even have to lose much weight to feel the benefit. Studies suggest that, if overweight, just five to 10 per cent weight loss can:

• restore normal hormone production – which can help regulate periods and improve fertility
• improve mood
• reduce symptoms such as:
  o facial and body hair growth
  o scalp hair loss
  o acne.

It can also reduce your risk of developing type 2 diabetes and cardiovascular disease.

Medical treatments for PCOS

Medical treatments for PCOS treatments include:

• the oral contraceptive pill – this is often prescribed for contraception, to regulate the menstrual cycle, reduce excess hair growth and acne and prevent the lining of the womb from excessive thickening
• medication to block hormones such as testosterone (for example, spironolactone) – these may be used to reduce excess hair growth or scalp hair loss
• insulin sensitising medications – these will help people who have insulin resistance, and may be useful for regulating menstrual cycles, improving ovulation (egg production) and fertility, avoiding progression to diabetes, and may assist with weight loss
• infertility medications – if infertility is a problem, clomiphene citrate (sold as Clomid), or aromatase inhibitors may be taken orally to bring about ovulation (egg production)
• psychological counselling.

Your GP and specialists can discuss possible treatments with you to help you decide what treatment best suits you.

Your PCOS management team

A team of health professionals working together with a multidisciplinary approach, is the best way to manage and treat PCOS. A healthcare team to help manage PCOS may include:

• your GP
- an endocrinologist (hormone specialist)
- a gynaecologist (for fertility or bleeding issues)
- a dietitian
- an exercise physiologist or physiotherapist
- a psychologist.

**Long-term health risks of PCOS**

PCOS is associated with the following long-term health risks:

- insulin resistance
- increased risk of the development of diabetes, especially if women are overweight
- cholesterol and blood fat abnormalities
- cardiovascular disease (heart disease, heart attack and stroke)
- endometrial cancer (if there is long-standing thickening of the lining of the womb).

**Diagnosis of PCOS**

Diagnosis of PCOS is likely to involve:

- your medical history
- an examination
- tests to measure hormone levels in the blood
- other tests when necessary, such as a pelvic ultrasound.

Early diagnosis is important to manage symptoms and may prevent long-term health problems such as diabetes from developing.

**Where to get help**

- Your [doctor (GP)]
- [Gynaecologist]
- [Endocrinologist]
- Local women’s health clinic
- Community health centre
- [Jean Hailes for Women’s Health 1800 JEAN HAILES (532 642)]
- [Dietitian]
- [Exercise physiologist]