



Diabetes and Endocrinology – WISDEM Centre

Polycystic ovary syndrome (PCOS)

Polycystic ovary syndrome (PCOS) is a name given to a condition which affects the way a woman's ovaries work.

This happens due to the hormone imbalance in the pituitary gland and the ovaries.

Polycystic ovaries (PCO) are very common, affecting around 1 in 5 women. Polycystic ovary syndrome is also very common, originally thought to affect 1 in 10 women (10%) but has recently been found to be as many as 1 in 5 (20%).

The term polycystic ovaries describes ovaries that contain many small 'cysts' (about twice as many as in normal ovaries), usually no bigger than 8 millimetres each, located just below the surface of the ovaries.

The 'cysts' in polycystic ovaries are not true cysts. They are not full of liquid, they do not get bigger or burst, and they do not require surgical removal and do not lead to ovarian cancer. They are actually follicles that have not matured to be ovulated which is why the name of the condition is confusing (www.verity-pcos.org.uk).

PCOS is associated with many risk factors which include:

- Obesity
- Diabetes
- Hirsutism (excess hair growth) or alopecia
- Increased cardiovascular problems



- Oily/acne prone skin
- Infertility/difficulty conceiving
- Sleep apnoea
- Low mood/low self-esteem/depression

According to the Rotterdam Criteria, to be diagnosed with PCOS you must have two out of the three following features:

- Irregular or absent periods
- Excess androgen, clinical or biochemical (male hormone)
- Polycystic Ovaries on Ultrasound (PCO)

Common symptoms of PCOS:

- Irregular or no periods
- Excessive hair growth
- Acne
- Difficulty getting pregnant
- Weight gain
- Thinning hair

Will I need to have any investigations to diagnose PCOS?

Yes, to confirm PCOS. This usually consists of a blood test and an ultrasound scan.

Irregular/Absent Periods:

- Your periods may not be regular from one month to the next month.
- They may be very heavy and prolonged.
- You may have no periods at all.

Why do my periods change with PCOS?

Because your ovaries are not getting the right hormonal signals from the pituitary gland in the brain, therefore your ovaries are not able to ovulate each month, and these may affect your periods and they may become irregular or absent.

Polycystic ovaries



"Polycystic Ovary Syndrome" by BruceBlaus is licenced under CC BY-SA 4.0

Not all women with PCOS have polycystic ovaries.

Some women have a scan and polycystic ovaries are confirmed to one or both ovaries, if a scan diagnoses PCO, you must have an additional feature of the Rotterdam criteria to be diagnosed with PCOS.

Polycystic ovaries consist of:

- A ring of harmless follicles (an underdeveloped sac which an egg develops) that is up to 8mm in size.
- Polycystic ovaries are confirmed by an ultrasound scan which confirms more than 12 follicles on at least one ovary or an increased ovarian volume (more than 10ml).
- These follicles are unable to release the egg and therefore ovulation doesn't take place.

How will they scan me?

The ovaries are most clearly seen by a vaginal ultrasound scan, but also abdominal scans are used for those who cannot have a vaginal scan.

This is performed by a health care professional who is trained within this field; they will insert a small ultrasound probe into the vagina, which enables them to view the ovaries.

The vaginal ultrasound scan may be a little uncomfortable but no more uncomfortable than a speculum examination for a smear test.

The scan should only last 5 minutes, and no special preparation is required, only an empty bladder.

There should be no side effects of the scan and you can go home the same day.

Are polycystic ovaries dangerous?

No, but may increase your risk of other factors.

Will I need surgery to remove the follicles?

No.

Are polycystic ovaries painful?

They shouldn't be, so if pain is experienced it may be from ovulation or from a cyst which will usually go without treatment.

Is there a cure for PCOS?

Advice will be given regarding lifestyle changes and if required medication can be prescribed to help with symptoms associated with PCOS.

What causes PCOS?

The exact cause is unknown although it is related to hormonal imbalance, insulin resistance and genetics (family history).

Excess androgens

Excess androgen is increased levels of male hormones (testosterone) which can contribute to:

- Hirsutism (Excess hair growth)
- Oily/Acne prone skin
- Alopecia (hair loss)

How will we know if I have increased androgens?

You will have excess hair growth, which is thick, dark, coarse hair, possibly on the lip, chin, chest, abdomen, and lower tummy, top of arms, thighs, back and bottom.

How will you determine the severity of hirsutism?

You will be assessed in clinic using a tool called the Ferriman-Gallwey tool, which looks at how severe the hair growth is on a scale of 1 to 4, the total is then calculated, and your Hirsutism score is monitored.

What treatment will I be offered for my excess hair growth?

Unfortunately, the NHS will not fund laser/electrolysis treatment; you can self-fund this as it is a recommended way to eliminate excess hair growth.

Medications can be prescribed to reduce excess androgens and reduce/eliminate excess hair growth.

Treatment

Treatment for the diagnosis of PCOS varies depending on the presenting symptoms and the possible risk factors.

You will be advised to make lifestyle changes to prevent symptoms getting worse, particularly if you are overweight.

Weight Loss/Maintenance

If you are of healthy weight/BMI we advise you follow a healthy diet to prevent weight gain which will prevent your symptoms worsening.

Obesity or increased weight can enhance symptoms of PCOS. Therefore, we advise if you are overweight/obese we advise that you lose weight to improve your symptoms.

We can:

- Refer you to a dietician for advice.
- Refer you to the weight management clinic.
- Prescribe medication to assist in lowering your BMI.

Weight loss will improve hormonal imbalance, improve ovulation, and reduce the risk of diabetes and cardiovascular problems.

If you are struggling to conceive, reducing your weight and BMI will allow you to go on to have fertility treatments.

Diabetes

PCOS increases your risk of becoming insulin resistant and of developing Type 2 Diabetes in the future.

To reduce the risk, we advise:

- Weight loss
- Blood test to monitor glucose level
- May start you on medication to prevent insulin resistance

If you develop diabetes we will:

- Inform your GP
- Commence you on diabetic medications
- If you have not already seen, refer you to a dietician

Infertility

If you are diagnosed with PCOS and cannot conceive we may:

- Advise you to lose weight if you are overweight.
- We may commence you on medications to induce ovulation (clomiphene).
- We may start you on a drug called metformin which lowers androgen levels and alters ovarian function by improving insulin sensitivity in the ovaries.
- Refer you to the reproductive medicine unit to discuss assisted fertility options.

If you are diagnosed with PCOS but are not actively trying to conceive but still have some of the symptoms, we may consider the combined contraceptive pill which helps to regulate your periods and potentially improve Hirsutism and acne.

If you have any concerns or queries relating to your PCOS diagnosis, please don't hesitate to contact us on 024 7696 6019:

Danielle Bate - PCOS Clinical Nurse Specialist Professor Harpal Randeva - Clinical Lead. Dr Puja Thadani - Clinical Fellow.

There are also support groups available to women with PCOS:

- VERITY
- PCOSAA
- PCOS UK
- PCOS CHALLENGE

The Trust has access to interpreting and translation services. If you need this information in another language or format, please contact the WISDEM Centre 0247 696 6027 and we will do our best to meet your needs.

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