



Top tips

Polycystic ovarian syndrome (PCOS)

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This resource has been produced on behalf of the PCWHS. It is for guidance only; healthcare professionals should use their own judgment when applying it to patient care.



1) Diagnose PCOS using the Rotterdam criteria.

- Two out of three criteria are required¹:
 - Oligo- or anovulation.
 - Clinical and/or biochemical signs of hyperandrogenism.
 - Polycystic ovaries on ultrasound.
- Exclude differentials such as thyroid dysfunction, hyperprolactinaemia, an androgen-secreting tumour or non-classic congenital adrenal hyperplasia. A testosterone level which is double the upper limit of normal or over 4.8nmol/L should raise suspicion of another diagnosis².
- European Society of Human Reproduction and Embryology (ESHRE) guidance³ says that a raised anti-Müllerian hormone (AMH) can be used in place of the ultrasound as the third diagnostic criteria. NICE are currently consulting on a new PCOS guideline, but at present AMH is generally not available in primary care.

2) Not everyone with suspected PCOS needs a scan.

- It follows from point 1, that if a woman has oligo/anovulation and either clinical or biochemical signs of hyperandrogenism, the diagnosis is made.
- If a scan is performed, it should ideally be done trans-vaginally.
- PCOS can present in a variety of ways:
 - Not all patients with PCOS will have polycystic ovaries on scanning⁴.
 - The rates of severe hirsutism, acne, metabolic sequelae and subfertility can vary with ethnicity^{5,6}.
 - Symptoms which could be attributable to PCOS can be normal in the early reproductive years, so the diagnosis should not normally be made in the first eight years after menarche.

3) Assess and monitor metabolic risk factors at an early stage.

- Screen for type 2 diabetes, dyslipidaemia, and hypertension, regardless of age at diagnosis³.
- Be aware that women with PCOS have a risk of cardiovascular disease which is higher than the (usually low) population risk for their age and sex³.

4) Lifestyle advice is a key part of the management of PCOS.

- Provide supportive, tailored lifestyle modifications including dietary and exercise advice.
- Sensitively addressing weight management can improve symptoms and outcomes
- Losing 5-10% of the starting body weight can improve metabolic, reproductive, and psychological outcomes⁷; this may seem like a more achievable initial goal than the goal of a BMI in the normal range.



5) Consider pharmacological interventions.

- Combined oral contraception (COC):
 - This can be used, if there are no contraindications, for menstrual irregularity and hyperandrogenic symptoms. Always use the UKMEC⁸ to assess for possible contraindications.
 - ESHRE³ recommends pills with $\leq 30\mu\text{g}$ of ethinylestradiol or equivalent and does not recommend a specific progestogen.
 - Pills containing cyproterone should be considered as second line, balancing the possible benefits on hirsutism and acne against the higher venous thromboembolism risk compared to some other COCs. The UK licence for cyproterone-containing COCs⁹ is for moderate to severe acne and/or hirsutism, related to hyperandrogenism, in women of reproductive age.
- Metformin:
 - ESHRE³ suggests that metformin should be considered for those who have PCOS and a $\text{BMI} \geq 25$, to improve metabolic outcomes.
 - NICE does not currently have a guideline on PCOS. Their guideline on diabetes prevention says that we should use clinical judgment on whether to offer metformin for those who are at risk of diabetes and have a deteriorating HbA1c (particularly with a $\text{BMI} \geq 35$, and in those who are either unable to participate in an intensive lifestyle change programme, or whose HbA1c has not benefited from such a programme)¹⁰. This will apply to some women with PCOS.
 - The NHS website also mentions metformin in this context, either to improve fertility or to improve metabolic outcomes, noting that this is off-licence⁷.
- Glucagon-like peptide-1 (GLP-1) receptor agonists:
 - ESHRE³ advise that these drugs (e.g. tirzepatide and semaglutide) could be used for management of weight in patients with PCOS.
 - They caution about the risk of weight regain when the drugs are discontinued.
 - GLP-1 agonists are prescribed widely in the private sector in the UK; NHS prescribing of tirzepatide in the private sector will start with those who have a $\text{BMI} \geq 40$ and at least four co-morbidities from an agreed list¹¹ – PCOS is not included in this list.
 - GLP-1 agonists may reduce absorption of oral contraception and oral progestogens used as part of HRT¹².



6) Psychological wellbeing is an integral part of holistic care.

- Screen for anxiety, depression, eating disorders and body dysmorphia; be aware that those with PCOS have a higher than background prevalence of moderate to severe depressive symptoms³.
- Ask for permission to discuss PCOS related psychosexual dysfunction where relevant³.
- Offer psychological support/talking therapies where appropriate.
- Signpost to patient support e.g. the charity Verity.

7) Aim to normalise BMI and reduce other risk factors before pregnancy.

- Raise the question of future plans for fertility at reviews if this feels appropriate and the woman has given permission for you to do so³.
- Counsel women on the risks of starting a pregnancy with a BMI \geq 30³.
- Offer folic acid at a dose of 5mg daily for any woman who is actively trying to conceive, or is sexually active without using reliable contraception, and who has a BMI \geq 30³.

8) Prioritise long term health along with fertility management.

- PCOS is a lifelong condition requiring individualised holistic healthcare—monitoring cardiovascular risk, mood, and metabolic health regularly can improve all outcomes.

9) Offer protection against endometrial hyperplasia.

- Women who are not using oral contraception should have a withdrawal bleed every 3-4 months, to avoid endometrial hyperplasia – this can be induced with a short course of progestogens¹³.

10) Collaborate with the wider multidisciplinary team where necessary.

- This may include dietitians, psychologists, endocrinologists, dermatologists, and fertility specialists.
- Holistic care leads to better outcomes for the patient.



Resources for professionals

- [ESHRE guideline.](#)
- [Professional reference article on PCOS from Patient.](#)
- Guidance on contraception and HRT for patient using GLP-1 agonists – [PCWHS](#), [FSRH](#), [BMS](#).

Resources for patients

- [NHS website page on PCOS.](#)
- [Verity website.](#)
- [Patient information leaflet.](#)

References

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