Monash IVF

Polycystic Ovary Syndrome (PCOS) Assessment, Management & Infertility

Factsheet

PCOS stands for Polycystic Ovary (or Ovarian) Syndrome and it is a hormonal disorder. Often a complex condition to identify, PCOS has several contributing symptoms however a patient does not have to have all of the symptoms to be diagnosed with PCOS. In fact, very few women have the same set of symptoms. To date the causes of PCOS are still unknown. No single gene has been found to cause PCOS, so the link is likely to be complex and involve multiple genes however there are indicators that suggest insulin resistance and a family history of diabetes do play a part.

How common is PCOS in families?

Immediate relatives (sisters or daughters for example) of females with PCOS are 50% more likely to have PCOS themselves.

Symptoms

PCOS can be a complex condition to identify because there are several indicators and a patient does not have to present with all of them to be diagnosed with the condition. Symptoms can include irregular or missing periods, growth of excessive facial or body hair, scalp hair loss, acne and/or oily skin, and sudden or unexplained continuous weight gain. PCOS also predisposes to longer term health risks such as diabetes, cardiovascular disease and mental health problems.[1]

What criteria is used for diagnosing PCOS?

A diagnosis of PCOS can be made when at least two of the following three criteria are met: 1. Irregular periods or no periods 2. Higher levels of androgens are present in the blood (hyper androgenism) shown by a blood test or symptoms such as excess facial, body hair growth, scalp hair loss or acne. 3. Polycystic ovaries (more than 20 follicles on one or both ovaries) are visible on an ultrasound or the size of one or both ovaries are >10ml. An ultrasound is not required if criteria 1 and 2 are met and ultrasounds are not recommended for women <20 years.

Useful resources can be found on:
askpcos.org

What is recommended as front line treatment?

There are several things a woman can do to increase the likelihood of falling pregnant. A healthy lifestyle (diet and exercise) has been shown to be very successful in increasing the chances of pregnancy. Reduction of excess weight has also been shown to assist; as little as 5-10% loss of initial body weight can help restore regular ovulation and greatly improve the chances of becoming pregnant. The oral contraceptive can also assist with both menstrual irregularity and hyper-androgenism (excess testosterone).

How does PCOS affect a female's fertility?

Around 70% of women with PCOS experience some difficulties in falling pregnant. A range of PCOS related factors may decrease fertility such as increased hormone levels, increased weight and lifestyle influences. Women with PCOS often have high levels of androgens and insulin which can affect their menstrual cycle and prevent or disrupt ovulation and thus making it more difficult to conceive naturally. And some women with PCOS can have a greater risk of miscarriage.

1. Helena J Teede, Chau Thien Tay, Joop Laven, Anuja Dokras, Lisa J Moran, Terhi T Piltonen, Michael F Costello, Jacky Boivin, Leanne M Redman, Jacqueline A Boyle, Robert J Norman, Aya Mousa, Anju E Joham, International PCOS Network , Recommendations from the 2023 International Evidence-based Guideline for the Assessment and Management of Polycystic Ovary Syndrome, Human Reproduction, Volume 38, Issue 9, September 2023, Pages 1655–1679, https://doi.org/10.1093/humrep/dead156.