



Polycystic ovarian syndrome

Polycystic ovarian syndrome (PCOS) is a common endocrine disorder affecting 12-18% of women of reproductive age in Australia. It is one of the most common causes of female infertility. PCOS is characterised by a hormonal imbalance causing enlarged ovaries containing multiple cysts or follicles, with “multiple” being 12 or more follicles on each ovary. This results in problems with ovulation, including problems with the normal growth and release of eggs from the ovaries.

Who is at risk?

PCOS is most common in women of childbearing age, and is rare in post-menopausal women.

Causes

While the exact cause of PCOS is unknown, there are certain associations which appear to be involved in the risk of developing PCOS.

- Genetics: Women with a family history of PCOS are at a higher risk of developing it themselves.
- Insulin: Excessive insulin production, which occurs when a person is insulin-resistant, is present in a large proportion of women with PCOS. Insulin resistance can be genetic or the result of being overweight, or a combination of the two.

Symptoms

The symptoms of polycystic ovarian syndrome vary from person to person and depend upon the nature and severity of the condition. Symptoms can be broken down into four categories:

Periods & fertility:

- No periods or periods that are irregular, infrequent and/or heavy
- Immature eggs and lack of ovulation
- Multiple ovarian cysts
- Infertility or subfertility

Hair & skin

- Excess facial and/or body hair
- Acne
- Scalp hair loss
- Darkened patches of skin

Mental & emotional health

- Mood changes
- Depression
- Anxiety

Sleep

- Sleep apnoea

These symptoms individually or in small groups can indicate a variety of conditions; however, if you experience multiple symptoms listed above or suspect endometriosis, ask your doctor to investigate.

Diagnosis

The diagnosis of polycystic ovarian syndrome involves taking a complete medical and family history, conducting a pelvic examination, undergoing pelvic imaging (ultrasound), and blood tests to detect hormone levels and in some cases glucose and cholesterol levels.

If severe endometriosis is suspected definitive diagnosis can be made through keyhole surgery where samples of extrauterine cell growth are taken and assessed in a lab to determine whether they are endometrium.

Treatment

The treatment of polycystic ovarian syndrome is based on the symptoms and individual concerns such as infertility, irregular menstrual cycle, acne or obesity.

Both medications and surgical treatment can be used for the management of PCOS.



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Infertility may be treated by fertility therapy, such as the prescription of ovulation-inducing drugs.

Oral contraceptives may be prescribed for the management of irregular menstrual cycles. Oral contraceptives effectively reduce the level of male hormone and are also effective in reducing excessive body hair growth.

Lifestyle modifications and anti-diabetic medications may be prescribed for the management or prevention of insulin resistance, obesity and diabetes mellitus.

Surgery may be recommended in patients who do not respond to medications. Laparoscopic ovarian drilling, an outpatient surgical procedure, may be used to treat the condition and induce ovulation.

Associated Risks

Patients with polycystic ovarian syndrome frequently develop other serious medical conditions such as diabetes mellitus, cardiovascular diseases, pregnancy induced high blood pressure (pre-eclampsia), miscarriage or premature delivery. These patients are also at risk of uterine cancer, anxiety or depression.