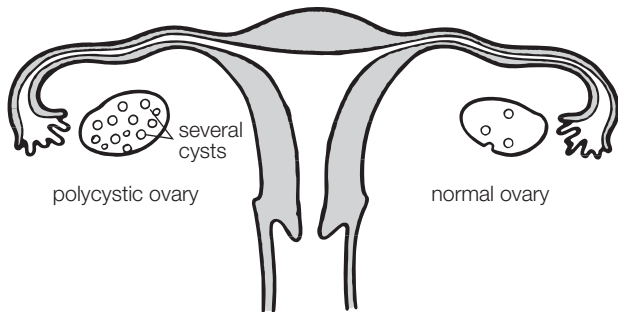


Polycystic ovary syndrome

What is polycystic ovary syndrome (PCOS)?

PCOS is the name given to a syndrome in which women have an enlarged ovary containing many small cysts, plus a number of specific symptoms.

The polycystic ovary is detected on an ultrasound scan but not all women with these enlarged ovaries have the syndrome. However, all women with PCOS have polycystic ovaries.



What are the symptoms?

There are 4 main features of the syndrome:

- subfertility: achieving pregnancy is more difficult
- menstrual problems:
 - scanty or no periods
 - irregular, usually lighter, bleeding
- weight gain
- excess hair on face (may be on arms and legs).

Other features are:

- acne
- increased miscarriage rate
- insulin resistance
- impaired glucose tolerance.

Who gets PCOS and how common is it?

PCOS can affect any woman between late adolescence and menopause. About 1 in 5 (20%) of premenopausal women have polycystic ovaries while 5 to 10% have the syndrome.

What is the cause of PCOS?

The exact cause is unknown. There is a hereditary factor with children of those affected having an increased risk. PCOS is believed to be due to an imbalance of hormones produced by the ovary. The master gland in the brain (the pituitary) senses this problem and releases increased amounts of hormones which stimulate the ovary to produce more cysts and thus more 'eggs'. However, the eggs (ova) do not seem to mature to ovulation.

How is PCOS diagnosed?

Pelvic ultrasound and blood tests to measure hormone levels are the main investigations. Removal of tissue lining the uterus (*endometrial biopsy*) is also a useful investigation.

What do polycystic ovaries look like?

The ovaries are enlarged with a thick white surface. They contain many cysts—at least 10—which are usually quite small, measuring about 2 to 8 mm.

What are the problems with PCOS?

The central problem is persistent lack of ovulation thus causing a fertility problem.

Biochemical problems include diabetes (type 2) and high cholesterol. Other concerns are an increased risk of hypertension, coronary heart disease and cancer of the uterus.

What is the first line of management?

Lifestyle modification requires attention in the first place. It is helpful to join a support group to share issues about the syndrome.

Weight control

The most important first line treatment is achieving weight loss for those who are overweight or obese. This can be difficult and may take a year or so. The help of an accredited practising dietician is advisable. The diet is based on low carbohydrate and energy control similar to that used for diabetes. Weight loss alone in obese women with PCOS can restore normal ovarian function.

Exercise

Regular exercise to control weight and keep fit is needed (e.g. 30 minutes of brisk walking each day).

Other management strategies

Hair removal

Unwanted hair can be removed by waxing or electrolysis.

Hormone therapy

For women not trying to conceive, the use of one of the oral contraception pills will help regulate cycles and improve troublesome symptoms including acne.

For those desiring to get pregnant, hormones used to induce ovulation and thus conception can be given by a specialist.

Surgical therapy

The modern method is to use a laparoscope to make several punctures in the ovary with a hot needle. This is called *Laparoscopic Ovarian Diathermy*. This has the ability to induce ovulation and increase the possibility of getting pregnant.

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