

# Polycystic Ovarian Syndrome (PCOS)

Polycystic Ovarian Syndrome (PCOS) is a common hormonal condition that affects many women of childbearing age.

## What are polycystic ovaries?

Polycystic ovaries is where the ovaries contain multiple small follicles (small fluid-filled structures containing eggs) that are wrongly described as "cysts". However, most of these follicles will not grow to maturity or produce eggs capable of being fertilised. The term 'polycystic ovaries' describes the appearance of the ovaries on an ultrasound scan.

Normal ovaries will produce 10-15 follicles a month, one of these will become the 'dominant' follicle and will release an egg at ovulation. Polycystic ovaries on the other hand, contain many small follicles producing different amounts of hormones and a dominant follicle does not develop as readily, commonly leading to difficulties with ovulation (or release of the egg).

## What is Polycystic Ovary Syndrome (PCOS)?

Polycystic Ovary Syndrome (PCOS) occurs when the increased ovarian follicles are associated with a hormone imbalance. This hormone imbalance can cause significant symptoms including irregular periods (or no periods at all), darker, thicker hair growth and acne due to increased testosterone levels and weight gain or obesity.

## Diagnosis

If a woman identifies with any two of the following criteria (called the Rotterdam criteria) a diagnosis of PCOS may be made:

- ♦ Evidence of ovulation problems (observed as menstrual dysfunction)
- ♦ Evidence of male hormone excess (including acne and/or excessive hair growth)
- ♦ Ultrasound evidence of polycystic ovaries

An ultrasound scan can indicate the presence of many small follicles. Blood tests can indicate whether a woman's levels of testosterone and LH are higher (often in conjunction with high LH to FSH ratio) than women with normal cycles as well as indicate a change in blood glucose and insulin levels.

## Effect on fertility

The symptoms of PCOS including irregular or no periods, along with a documented increase in the risk of miscarriage, mean the chance of getting pregnant naturally is lower.

## Treatment

Treatment depends on the main problem experienced and whether the woman is currently trying to conceive:

- ♦ Irregular periods are common and can be treated successfully with the contraceptive pill, though this method is only useful for women who do not wish to become pregnant.
- ♦ Hair growth and acne problems mainly relate to high levels of testosterone in which case the use of anti-androgen such as spironolactone, or oral contraception like Marvelon or Diane 35-ED are effective in milder cases.
- ♦ Weight loss can be more difficult due to high levels of testosterone, however even a 5% weight loss in women will significantly improve fertility.
- ♦ Insulin sensitisers such as Metformin, reduce the impact of insulin resistance and can also assist in weight loss.
- ♦ Ovulation inducing drugs such as Clomiphene can stimulate the ovaries.
- ♦ IVF treatment may be necessary in very difficult situations.

