



The Polycystic Ovary Syndrome: Patient Information



The polycystic ovary syndrome is one of the causes a woman may not get pregnant as quickly as she would plan. However, if pregnancy does not occur within a reasonable period of time, effective treatment is available.

What is the Polycystic Ovary Syndrome?

A woman with the polycystic ovary syndrome has ovaries which are 'polycystic', plus some or all of the features described below. About one in five (20%) women have polycystic ovaries, however, not all of these women have the polycystic ovary syndrome.

Many women do not know they have polycystic ovaries. Polycystic ovaries are most easily seen by an ultrasound scan. They contain many small cysts usually no bigger than 8mm in diameter. Some of these cysts contain eggs. These small cysts usually do not get any bigger; with time they disappear, only to be replaced by other small cysts. They do not need to be removed by surgery. A cyst (also called a follicle) grows to about 20mm diameter before it releases an egg. Only very large cysts - more than 50mm diameter - need to be removed.

At present, the cause of polycystic ovaries and/or the polycystic ovary syndrome is not entirely clear. In part, they may be inherited and be present in women of any age. Ovaries do not suddenly become polycystic; however, women who have always had polycystic ovaries may develop symptoms at any time.

Other Features of the Polycystic Ovary Syndrome

1. Irregular periods

Menstrual periods may be irregular, heavier than usual or prolonged, occur after long time intervals, or in some women not at all. This is because ovulation does not occur regularly.

2. Less frequent ovulation

Instead of ovulating once each month, a woman with the polycystic ovary syndrome may ovulate irregularly, usually not every month. This means, without treatment, these women do not have as many chances each year to become pregnant. Polycystic ovaries do not regularly respond to the quantity of hormones which come from the pituitary gland. However, they usually respond to additional amounts of these hormones given as treatment.

3. Miscarriage

The polycystic ovary syndrome is now recognised to be one of the conditions which increases the risk of miscarriage. This is due to the higher blood levels of the hormone called LH, often found in women with this syndrome.

4. Acne and unwanted body hair

the blood level of the male hormone testosterone may be slightly higher in women with the polycystic ovary syndrome than in other women and this causes acne, greasy skin and unwanted hair growth on the face, chest and abdomen. The blood



levels of testosterone in women with the polycystic ovary syndrome are still much lower than the levels found in men.

5. Body weight

Weight gain is common in women with the polycystic ovary syndrome. However, not all such women are overweight. Some women with polycystic ovaries only develop symptoms of the syndrome when they put on weight. There are many other advantages in maintaining a normal body weight. For instance, women who are overweight have an increased risk of heart disease, diabetes and arthritis later in life.

Long Term Health and the Polycystic Ovary Syndrome

Ordinarily, a woman with this syndrome does not have an increased risk of cancer of the ovaries. It has been suggested that treatment to stimulate the ovaries in any woman may very slightly increase the risk of ovarian cancer. This possibility is still being investigated and as yet is not proven.

Women who do not have regular periods may have a slightly increased risk of developing cancer of the endometrium. This can happen when the internal lining layer of the womb (the endometrium) becomes too thick. Regular shedding of the endometrium by having regular periods prevents endometrial cancer. If the endometrium appears thick on an ultrasound scan, or if very irregular, prolonged bleeding occurs, a curettage might be advised.

Treatment for Women with the Polycystic Ovary Syndrome

This syndrome should not be regarded as a disease. It is a characteristic of the body of some women which cannot be permanently 'cured'. However, the symptoms described above may be controlled with medical treatment. All women with polycystic ovaries should try to maintain a normal weight.

1. Irregular periods

For women who have no wish to become pregnant, menstrual periods may be controlled by a low dose pill. Women who cannot take the pill should try a progesterone-only treatment (eg. Provera or Primulot N) for 12 days each month. Any irregular bleeding should be checked by a doctor, who may advise an ultrasound scan or curettage. A pap smear should be taken at least once every two years.

2. Difficulty in conceiving

This is most likely due to lack of regular ovulation in women with polycystic ovaries. However, you should remember other causes of infertility such as blocked fallopian tubes, or a partner with a low sperm count, may be present.

When ovulation is irregular or not occurring at all, drug or hormone treatment may be required. The most common treatment is with clomiphene citrate (Clomid) which is taken as a tablet for five days, early in the cycle. Clomiphene can cause thickening of mucus in the cervix and this may prevent the passage of sperm through the cervix. Therefore, although clomiphene may cause ovulation, pregnancy will not always occur.



Clomiphene is not always useful in women with the polycystic ovary syndrome because it may exaggerate the rise in blood levels of LH during the first part of the cycle. This reduces the chance of a successful pregnancy.

A few women experience side effects with clomiphene including bloating, headache, stomach upset, breast discomfort, dizziness and depression. The risk of a multiple pregnancy is slightly increased by the use of clomiphene. There is no increased risk of birth defects from fertility drugs.

If clomiphene does not help, hormones which are injected may be used. The hormones used, FSH and LH, are called gonadotrophins. These are pituitary hormones, which are extracted from human urine or synthesized in the laboratory. Gonadotrophins extracted from human pituitary glands are NOT used. FSH is mainly responsible for stimulating the growth of cysts or follicles and LH stimulates release of the egg from the follicle.

Polycystic ovaries are usually very sensitive to stimulation by these hormones and commonly more than one follicle will grow when the injections are given. Because of this, courses of treatment begin with low doses and the response is carefully monitored by blood tests and ultrasound scans. If monitoring shows that too many follicles are developing and the risk of multiple pregnancy is high, the treatment will be stopped and it may be necessary to use contraceptive measures for several days.

Women with polycystic ovaries given gonadotrophins are at an increased risk of a serious, uncommon condition called the ovarian hyperstimulation syndrome. This condition occurs if too many follicles are stimulated, resulting in abdominal swelling and nausea. Careful monitoring is essential to avoid this situation.

When other treatments have not been successful in causing a pregnancy, In vitro fertilisation (IVF) may be offered to women with the polycystic ovary syndrome. This treatment involves collecting eggs from a women's ovaries (usually after she has been given gonadotrophin injections), then fertilising them with her partner's sperm, in the laboratory. IVF carries a risk of ovarian hyperstimulation syndrome and therefore a woman having this treatment must be carefully monitored.

3. Skin problems

Acne and unwanted body hair may be reduced by taking a combination of tablets. Oestrogen (as found in the oral contraceptive pill) is combined with an antiandrogen tablet (usually spironolactone or cyproterone acetate) and the combination must be taken for many months to obtain some benefit. This therapy is, of course, contraceptive and therefore is of no use to those trying to conceive. Waxing and electrolysis may be used to remove unwanted hair while waiting for the hormone treatment to work. However, they should be performed by a trained therapist as scarring can result from unskilled treatment. If the skin problem is related to the polycystic ovary syndrome hormonal treatment is the logical solution.