Living with Polycystic Ovary Syndrome

Polycystic Ovary Syndrome (PCOS) is one of the most common female hormonal disorders which affects approx 10% of reproductive age in women (12—45 years old) of all races and nationalities. PCOS is a condition which can affect a woman’s menstrual cycle, fertility, hormones, and aspects of her appearance and additionally can affect long-term health.

Symptoms

Symptoms of PCOS may vary from woman to woman. Some women have mild while others are affected more severely by a wider range of symptoms.

The symptoms may include:
- Irregular periods or no periods at all
- Difficulty becoming pregnant (reduced fertility)
- Presence of more facial or body hair than is usual (hirsutism)
- Loss of hair on your head
- Being overweight
- Rapid increase in weight
- Difficulty losing weight
- Oily skin and Acne
- Depression and mood swings

Human body contains glands which secrete several types of hormones (chemical messengers) which control body’s functions. The aforesaid symptoms are caused due to the secretion of abnormal hormone.

Causes

The cause of PCOS is not yet known but it is linked to insulin resistance. Insulin is a hormone made in the pancreas which helps the body use energy from food. Insulin resistance occurs when the body does not respond to normal levels of insulin and this result in more insulin production. High levels of insulin encourage the body to store fat which can lead to weight gain.

As weight goes up, insulin resistance increases. Insulin also promotes the production of testosterone in the body. Testosterone is often thought of as a male hormone but women need a small amount. However, having even its slightly higher amounts can upset the balance of hormones in the body and lead to acne, excess hair and irregular periods and ultimate cause to an infertility in woman.

Long term health concerns associated also with insulin resistance.
Diagnosis

PCOS can be diagnosed by any combination of blood test results, an ultrasound scan or from a history of symptoms. Sometimes the cysts may not be seen during a scan but a diagnosis can still be made using symptoms and blood test results.

A diagnosis is usually made when any two of the following observed:

- Irregular, infrequent periods or no periods
- More facial or body hair than is usual for you and/or blood tests which show higher testosterone levels than normal
- An ultrasound scan which shows polycystic ovaries.

Treatment

There is no treatment as such for the condition. Symptoms are treated according to individual patient’s circumstances but most of symptoms and long term health issues will be solved by losing weight and metformin which we discussed below,

The benefits of losing weight include:

- A lower risk of insulin resistance and developing diabetes
- A lower risk of heart problems
- A lower risk of cancer of the womb
- A more regular periods
- An increased chance of becoming pregnant
- Reduction in acne and a decrease in excess hair growth over time
- Improved mood and self-esteem, in lifestyle, paying particular attention to diet and exercise can control this.

Weight loss itself may correct any period problems, regain ovulation and reduce the risk of miscarriage. There is evidence to show that the reduction of excess weight can improve most of the problems related to PCOS by helping to restore the hormone balance. Even a 10 percent loss in body weight can restore a normal period and make your cycle more regular.

Metformin

This medicine increases the sensitivity of muscle cells to insulin (reduces insulin resistance). This means less insulin to control blood sugar levels. Reduced insulin levels in the blood means ovaries will produce less testosterone. As the testosterone levels drop symptoms such as excess hair and irregular periods will improve, and ovaries will start to release eggs (improve fertility).

Hyperandrogenism (hair growth, acne)

Unwanted hair can be removed by waxing, hair-removing creams, electrolysis, and laser treatments. These need repeating every now and then, although electrolysis and laser treatments may be more long-lasting. A cream called eflornithine (Vaniqua) may be prescribed. Dianeette and Yasmen are antitestosterone drug commonly prescribed to regulate periods, to help reduce hair growth, to reduce acne, and is a good contraceptive. Drugs taken by mouth to treat hair growth take 3 - 9 months to work fully.
Infertility

The irregular and infrequent ovulation caused by PCOS can make it difficult to conceive naturally. If weight loss is not successful, ovulation can be stimulated artificially using drugs. If the tablets fail, hormone injections can be used to stimulate the ovaries. For women unresponsive to medical treatment, surgery in the form of laparoscopic ovarian diathermy (using heat to cut tissue) can be used on each ovary. This is usually associated with ovulation induction with drugs. The hormone environment can improve but the effect is only temporary usually lasting for six months.

What could PCOS mean for long-term health?

Greater risk of developing the following long-term health problems:

**Insulin resistance and diabetes**

If blood glucose does not stay normal, this can lead to diabetes. One or two in every ten (10–20%) women with PCOS go on to develop diabetes at some time. Untreated, this causes damage to organs in the body. With PCOS risk of developing diabetes is increased further if:

- over 40 years of age
- have relatives with diabetes
- developed diabetes during a pregnancy (known as gestational diabetes)
- are obese (body mass index or BMI over 30).

**High blood pressure**

Women with PCOS tend to have high blood pressure, which is likely to be related to insulin resistance and to being overweight, rather than the PCOS itself. High blood pressure can lead to heart problems and should be treated.

**Heart disease**

Developing heart disease is linked to health conditions such as diabetes and high blood pressure. If you do not have these conditions, there is no clear evidence that just PCOS will lead to heart disease than women who do not have PCOS.

**Cancer**

With fewer periods (less than three a year), the endometrium (lining of the womb) can thicken and this may lead to endometrial cancer in a small number of women. There are different ways to protect the lining of the womb using the hormone progestogen. This may include a five-day course of progestogen tablets used every three or four months, taking a contraceptive pill or using the intrauterine contraceptive system. PCOS does not increase your chance of breast, cervical or ovarian cancer.

**Depression and mood swings**

The symptoms of PCOS may affect how you see yourself and how you think others see you. It can lower your self-esteem.

**Snoring and daytime drowsiness**

PCOS can lead to fatigue or sleepiness during the day. It is also associated with snoring.

**Have a healthy lifestyle**

The main ways to reduce overall risk of long-term health problems are to:

- eat a healthy balanced diet.
- eat meals regularly especially including breakfast
- take exercise regularly (30 minutes at least three times a week).
- aim to keep weight to a level which is normal (a BMI between 19 and 25).

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CEDARS - Jebel Ali International Hospital is a full-fledged multi-specialty hospital offering services ranging from Pediatrics to Occupational Health, Laparoscopic Surgery to Internal Medicine. The Hospital is equipped with ICU for medical and surgical emergencies, with two major and one minor operation theatres and runs fully equipped Laboratory and Radiology departments. CEDARS – Jebel Ali International Hospital is accredited by TUV and JCI and located next to JAFZA Gate 2.
Have regular check ups

Once diagnosed with PCOS, it is important to have regular check ups to monitor early signs of health problems.

Women with PCOS over the age of 40 should be offered a blood sugar test once a year to check for signs of diabetes.

If a person with PCOS have not had a period for a long time (over 4 months) she may be offered a referral for further tests including an ultrasound scan.

Discuss with doctor how often you should have your blood pressure checked and whether you should have blood tests for cholesterol levels.

Is there a cure?

There is no cure for PCOS. Medical treatments aim to manage and reduce the symptoms or consequences of having PCOS. Medication alone has not been shown to be any better than healthy lifestyle changes (weight loss and exercise). Many women with PCOS successfully manage their symptoms and long-term health risks without medical intervention. They do this by eating a healthy diet, exercising regularly and maintaining a healthy lifestyle.

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Dr. Gulerana Shoaib is a Fellow of College of Physicians and Surgeons with more than 9 years experience in gynaecology/obstetrics in Pakistan and Saudi Arabia.

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She worked as Senior Registrar in Patel Hospital and postgraduate institute in Pakistan for 3 years and Prince Salman Bin Abdul Aziz Hospital, Riyadh, KSA in 2010. She handled emergency surgeries and planned surgeries, performed independent assisted deliveries, caesarean deliveries, hysterectomies (vaginal and abdominal), and laparotomy. She also assisted in oncological and laparoscopic surgeries. Furthermore she conducted research and gave weekly presentations of complicated cases in multi-disciplinary and oncological meetings.

Dr. Gulerana Shoaib worked as specialist in Koohi Goth Women Hospital Research & Training Centre Karachi. She did high risk Opds and performed routine gynaecological surgeries such as evacuation, laprotomy, and vaginal and abdominal hysterectomy, normal and assisted delivery and cesarian section.

She has special interest in adolescent gynaecological problems, early pregnancy complications, high risk pregnancies and infertility. She also provides support and counseling to patient and families. Dr. Gulerana Shoaib is master trainer of workshops for counseling, manual vacuum aspiration (IPAS), and emergency obstetrics by UNICEF. She is also the member of Right to Life and Health Project of UNICEF in Pakistan.

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