

# PCOS

## A SILENT EPIDEMIC

### PCOS AWARENESS MONTH



Most women expect to have children after one or two years of marriage, and most of them do but women who are affected by chronic health conditions such as Polycystic Ovary Syndrome (PCOS), often have concerns about childbearing, including whether they can become pregnant.

PCOS is a complex hormonal condition that affects 1 in 5 women of reproductive age group. Although 40% of women affected by PCOS suffer from infertility, 90% conceive after proper management.

If a woman has two of the three following characteristics, she may have polycystic ovary syndrome:

1. Evidence of anovulation or irregular menstrual cycle.
2. Evidence of hyperandrogenemia either clinically or biochemically, meaning there is evidence of elevated male hormone production. This is measured by a blood test that measures testosterone levels. Another indication is hirsutism or hair growth issues, which is abnormal hair growth in hormonally dependent areas, including the upper lip, the chin, the face, the breast, and the lower abdomen. It can be very mild to very severe.
3. When you have a polycystic ovary appearance on transvaginal pelvic ultrasound, the image looks like tiny cyst-like formations. They are eggs or follicles rimming the ovaries, starting to grow, and then stopping at a small follicle size of approximately 2-10 mm. This appearance is very characteristic and can be used for making a diagnosis.
4. While making the diagnosis of PCOS, other medical conditions that present like PCOS must be eliminated. The following hormone conditions must be ruled out before making the diagnosis of PCOS: thyroid disease, ovarian and/or adrenal tumors, adrenal enzyme deficiency, and prolactin abnormalities.

#### HOW TO INCREASE CHANCE OF PREGNANCY?

As for all women, being in the best possible health before planning pregnancy, increases the chance of pregnancy.

According to the international evidence-based guideline for the assessment and management of PCO, adopting a healthy lifestyle - including being in the healthy weight range, not smoking, not having alcohol, eating a healthy diet, getting plenty of regular exercises, adequate sunlight exposure, and enough sleep - is the first thing to do to improve a woman's chances of becoming pregnant and having a healthy baby.

To get the right kind of advice and support, women planning to get pregnant should have a pre-conception health check with their infertility specialist. This is also an opportunity to discuss a plan of action in case the PCOS causes fertility difficulties.

For women with PCOS who are overweight or obese, modest weight loss sometimes results in more regular ovulation, which increases the chance of pregnancy.

For those who know they ovulate, having sexual intercourse during the "fertile window" (before and during ovulation) boosts the chance of conception.



#### SYMPTOMS OF PCO?

PCOS affects approximately 5 to 10 percent of the world's population, and recent studies also suggest that it is rising among women of Asian descent.

#### CLINICAL FEATURES:

- 1) Menstrual abnormalities - Irregular cycles.
- 2) Hyperandrogenism signs - Acne, seborrhoea, alopecia, frank virilization.
- 3) Metabolic abnormalities - Obesity, insulin resistance, risk of diabetes and cardiovascular disease.
- 4) Reproductive abnormalities - Infertility.
- 5) Polycystic ovaries on USG.

#### CAUSES:

- The main cause of PCOS is still unknown. The possibility of a genetic link has been found in select studies. Just as one might have a genetic predisposition to diabetes, one might also have a disposition to PCO.
- Although the specific cause of PCOS is unknown, the condition results in hormonal imbalances that curtail or prevent ovulation—the body's process of producing and releasing eggs from the ovary. It is common for women with PCOS to have an inappropriate production of follicle-stimulating hormone (FSH) and luteinizing hormone (LH). As a result, they experience limited follicular development (follicles are small sac-like structures within the ovaries, and each follicle contains an egg). With limited follicular development, egg development will not occur. Also, women with PCOS have an increase in testosterone and other male hormones (androgens) leading to symptoms like excessive facial hair, etc.
- Clinically, the limited egg development may result in irregular ovulation or a complete lack of ovulation (anovulation), which can persist for months or

even years. This ovulatory dysfunction is what causes infertility in these women. Also, when anovulation is prolonged, the endometrial tissue in the uterus can get very thick, resulting in heavy and/or irregular periods.

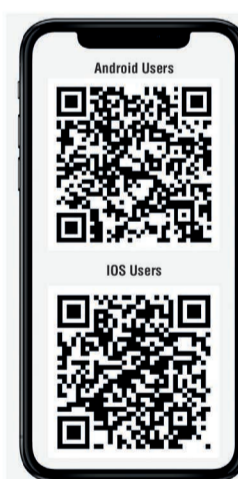
- It is also common for women with PCOS to have an insulin insensitivity. This many times can predispose them to have increased weight gain and obesity that places the patient at higher risk for diabetes and cardiovascular disease.

#### DOES PCO AFFECT FERTILITY?

Yes, PCOS causes infertility - accounting for roughly 20-25% in all cases of infertility. Many fertility procedures can take care of infertility due to PCOS making it possible for most to get pregnant if treated early on before age becomes a significant factor.

#### COMMON FERTILITY TREATMENTS FOR THOSE WITH PCOS:

- Ovulation Induction with



Timed Intercourse or Intrauterine Insemination (IUI): Since most women with PCOS do not ovulate, medication to help stimulate ovulation is started.

- Depending on the initial testing, a fertility specialist may recommend a patient to start ovulation induction medication with timed intercourse, or intrauterine insemination (IUI) can be scheduled around the time of ovulation. For these treatments, it is important that her Fallopian tubes are open and the partner's sperm count is normal.
- This is usually the first medical intervention for someone who is trying to get pregnant with PCOS encounters. Ovulation induction involves taking medication (oral medication and sometimes a trigger shot) to help stimulate ovulation. Couples are given dates for timed intercourse or intrauterine insemination accordingly.
- Laparoscopic Ovarian Drilling: This is done in women who have failed multiple ovulation induction cycles, or in women who have no response to ovulation induction medication. Here 4 punctures are made on the ovaries using an energy source, this procedure reduces the hormone imbalance and improves the pregnancy success rates. It's a simple yet effective, day care procedure and the patient responds well to medication post-surgery.
- In Vitro Fertilization (IVF): IVF is the gold standard of fertility treatments, offering the quickest time to pregnancy per treatment cycle for anyone (including those with PCOS).

Your specialist may advise IVF if ovulation induction with timed intercourse or IUI has failed to achieve a pregnancy, or if other factors are contributing to infertility such as blocked fallopian tube/endometriosis/

#### INFERTILITY DEPARTMENT

**DR. VANDANA HEGDE**

Clinical Director

**DR. DURGA VYTLA**

Clinical Head - Miyapur

**DR. JASMINE SALKAR**

Consultant Reproductive Medicine

**DR. SHALINI SINGH**

Consultant Reproductive Medicine

**DR. ARCHANA A NAGAONKAR**

Consultant Reproductive Medicine

**DR. LAVANYA BOMMAKANTI**

Consultant Reproductive Medicine

**DR. SNEHA SHETTY**

Consultant Reproductive Medicine

**DR. INDRANI MOGILI**

Consultant Reproductive Medicine

#### ANDROLOGY & EMBRYOLOGY DEPARTMENT

**DR. AKASH AGARWAL**

Scientific Director & Chief Embryologist

#### GENETICS DEPARTMENT

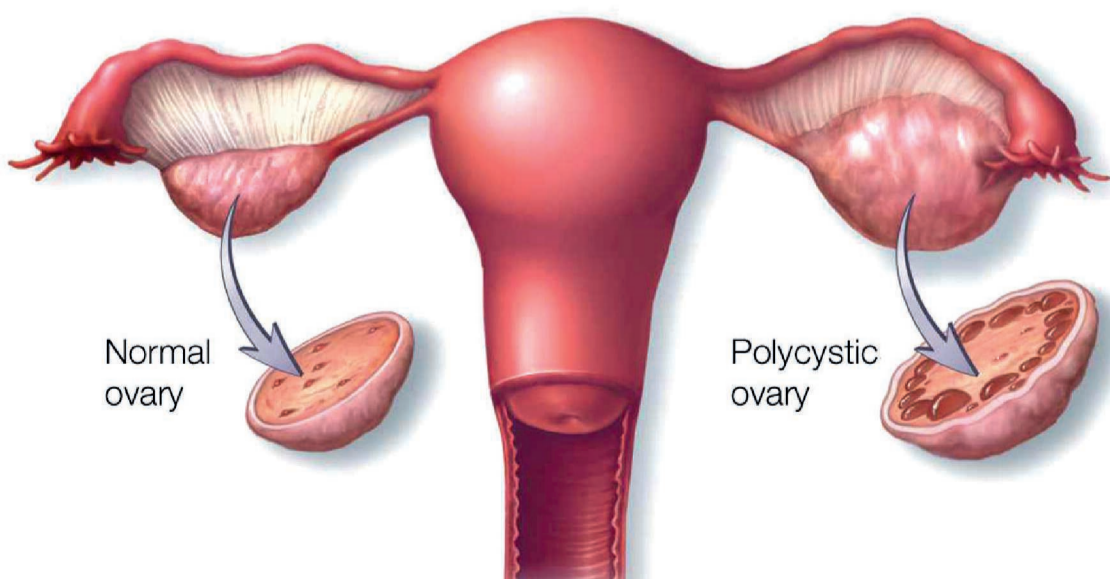
**DR. SURBHI KAPOOR**

PhD - Human Genetics

#### DEPARTMENT OF LAPAROSCOPY

**DR. PRASHANT HEGDE**

Medical Director,



For any further details about Times Health, contact [kiran.tsm@timesgroup.com](mailto:kiran.tsm@timesgroup.com)