

# Polycystic Ovary Syndrome

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**Abstract:** This article provides a comprehensive overview of Polycystic Ovary Syndrome PCOS, a common endocrine disorder in women. It explores the causes, symptoms, diagnosis, and management strategies for PCOS, with a focus on lifestyle modifications and medical treatments. The article also discusses the potential complications and risks associated with the condition.

**Keywords:** Polycystic ovarian syndrome, pcos, menstrual cycle, infertility, hormones, progesterone, ovaries.

## 1. Introduction

Polycystic ovary syndrome (PCOS) is the most common endocrine disorder in females with a high prevalence. The etiology of this heterogeneous condition remains obscure and its phenotype expression varies. Two, widely cited, previous PCOS consensus workshops focused on diagnosis (published in 2004) and infertility management (published in 2008). The present third PCOS consensus paper summarizes current knowledge and identifies knowledge gaps regarding various women's health aspects of PCOS. Relevant topics addressed—all dealt with in a systematic fashion—include adolescence, hirsutism and acne, contraception, menstrual cycle abnormalities, quality of life, ethnicity, pregnancy complications, long-term metabolic and cardiovascular health and finally cancer risk.

### What is PCOS (PCOD) Causes, Symptoms and its Prevention

PCOD (Earlier Stage) and PCOS (Later Stage) both are difference name for same disease which has most common hormonal disorder affecting women, associated with ovaries.

Full form of PCOD – Polycystic Ovarian Disease

Full form of PCOS – Polycystic Ovarian Syndrome



PCOD disease will eventually turns into PCOS when it manifests by increased weight gain (obesity), excessive hair growth, increased male hormone, decreased voice, hair loss (male pattern loss) and diabetes.

### What is PCOS (PCOD)

In your body you have two ovaries. They are use to produce follicles which then grow to form eggs. The eggs then reach into uterus for fertilization, when fertilization doesn't occur; you have your menstrual cycle operating to take care of it.

In cases of PCOD, follicles are created, but they don't grow into egg. The ovaries keep on generating follicles and this

causes too many cysts in it. Eggs are not forming which gives rise to menstrual cycle and no fertilization. Ovaries are not functioning properly they continue to make more of male hormones which lead to excess growth of hair or excessive hair fall.

PCOD is the most common hormonal reproductive problem in women of childbearing age. An estimated 5 to 10 percent of women of childbearing age have PCOD.

PCOD is condition which affects ovary that can produce different problems to women as below.

- Irregular menstrual cycle
- Fertility
- Hormones changes
- Increased Insulin production
- Heart & blood vessels problems
- High levels of male hormones (androgens)

### Causes of PCOD (PCOS)

The exact cause of PCOD is not known but PCOD can cause because of genetic disorder. As Women with PCOD frequently have a mother or sister with PCOD.

There is not yet enough evidence to say there is a genetic link to this disorder.



- Due to our changing lifestyle and diet patterns (junk food, unhealthy lifestyle, stress) young women are facing this problem most commonly.
- When Ovary fails to develop a mature egg and generate multiple immature follicles. Due to these multiple cysts hormonal imbalance occurs. Diet, stress, overweight can cause multiple cysts.



- Many women with PCOD have weight problem.
- Researchers are looking at the relationship between PCOD and the body's ability to make insulin. Insulin is a hormone which regulates the change of sugar, starches and other food into energy. Some women with PCOD secrete much insulin, it could be possibility that ovaries react by making too many male hormones called androgens. This can lead to ovulation problems, weight gain, excessive hair growth and acne.

#### Which Women's are more prone to PCOD (PCOS)

Some women who match one of below factors in them are more prone to PCOD (PCOS).

- Family history of ovarian cysts
- Overweight women
- No physical activity
- Stressful life
- Increased fat (lipid) levels
- Increased Insulin/glucose (sugar)
- High Blood pressure (hypertension).
- Overactive pituitary glands.
- Over-production of male hormone (testosterone).

#### Symptoms of PCOD (PCOS)

List of all symptoms of PCOD is given below. Not all can be observed at same time but you can see various combinations of these symptoms in patients.

- Irregular/absent menstrual cycles, Irregular bleeding
- Infertility or inability to get pregnant because of not ovulating
- Increased growth of hair on the face, chest, stomach, back, thumbs, toes
- Acne, oily skin, dandruff
- Pelvic pain
- High blood pressure
- Weight gain or obesity, Extra weight around the waist

- Patches of thickened and dark brown or black skin on the thighs, arms, breasts, neck
- Skin tags or tiny excess flaps of skin in armpits or neck area

#### How to diagnose PCOD (PCOS)

There is no test in place to diagnose PCOD. To diagnose it accurately doctors consider below things.



- A detailed medical history
- Physical examination
- Ultrasound
- Hormone levels
- Blood glucose levels

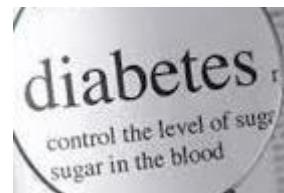
#### PCOD (PCOS) complications & Risks

Women with PCOD can be at high risk for developing several other conditions.

- Irregular menstrual periods and the absence of ovulation cause women to produce the hormone estrogen and not produce progesterone hormone. Without progesterone which helps endometrial to shed each month as a menstrual period, Endometrial becomes thick, which can cause heavy bleeding or irregular bleeding. Eventually, this can lead to endometrial hyperplasia or cancer.
- Diabetes
- High cholesterol
- High blood pressure
- Heart disease

#### PCOD treatment & diet to cure PCOS

Various treatment options are given to patients based on symptoms. Treatment is also based on if patient wants to conceive or needs contraception. We have listed most commonly used treatments used for PCOD.



- Diabetes – Type 2
- High cholesterol
- Male-pattern baldness or thinning hair

- Birth control pills
- Diabetes Medicines
- Fertility Medicines
- Medicine for increased hair growth or extra male hormones

- Advice to maintain healthy weight

#### How can you reduce Risks of PCOD (PCOS)

Precautions are better than cure. You can identify the symptoms in early stages and work hard on keeping them under control. If you do it an earlier age may help to reduce this risk. Below activities can help you overcome PCOD.



- Losing weight
- Balanced diet (under guidance of expert nutrition expert or doctor)
- Healthy nutrition's (under guidance of nutrition expert or doctor)
- Yoga & exercise (under guidance of expert)

#### Weight loss a way out of PCOD (PCOS)

Weight loss can help coping with the hormonal imbalances in women suffering from the PCOD. Even loss of 10% of her body weight can help make a woman's cycle more regular.

Contact specialist like diet expert, Nutrition expert, Yoga trainer. Make sure you follow diet by which you could reduce weight, yet you will have good nutrition's as per your body needed during PCOD.

Always keep your doctor posted on the method (Diet, Yoga, and Exercise) which you are using to lose your weight. He will be the best person to give you best way to lose your weight.

#### What is diet to follow for PCOD (PCOS)



- Eat food with less sugar and Carbohydrate
- Eat food with more fiber.
- Eat lower glycemic index foods such as whole grains (jowar, bajra, whole wheat).
- Food with low in Saturated Fats
- Wheat, Oat flakes
- Fresh fruit, Fruit juices, lots of vegetables, Legumes and Nuts

- Prefer food with protein

#### Nutrition's to be looked during PCOD (PCOS)

- Vitamin B6 – Maintains the hormone balance this is key to control PCOD.
- Vitamins B2, B3, B5 and B6 are particularly useful for controlling weight.
- Vitamin B5 – Helps to control fat metabolism so helpful in weight loss.
- Vitamin B6 with B2 and B3, is necessary for normal thyroid hormone production.

Contact your family Doctor or nutrition expert to get details on exact nutrition's diet to follow as per your body's need during PCOD.

#### Benefits of Yoga in PCOD (PCOS)

- Yoga during PCOS/PCOD will help open up the pelvic area and promote relaxation.
- Pranayamas and meditation are powerful techniques that help calm the mind. Yoga helps de-toxify and de-stress the entire system.
- Yoga helps in regulating endocrine glands, which are responsible in making hormones.
- Once endocrine glands regulates that will help in balancing the male and female hormones in the body.
- Yoga compiled with naturopathy gives faster relief in the symptoms related to PCOD.



#### Yoga Asanas to follow in PCOD (PCOS)

Various yoga asanas will help to increase blood circulation to your ovaries; this will lower down the number of cysts being formed.

Below is list of asanas you can follow during PCOD.

- Shavasan
- Pranayamas
- Padma Sadhana
- Butterfly Pose
- SuptaBadhakonasana
- Bharadvajasana
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**Note:** Please execute these asanas under guidance of yoga professional.

**Relaxation is key to overcome PCOD (PCOS)**

Always Keep yourself relax. Stay away from stress and tension. When your mind is free and healthy you will feel healthy and light. This healthy mental condition will help you fight against PCOD best way.

**Laparoscopy & Surgery for PCOD (PCOS)**

Although surgery is not recommended as the first course of treatment, surgery called Ovarian Drilling is available to induce ovulation. The doctor makes a very small incision above or below the navel and inserts a small instrument that acts like a telescope into the abdomen. This is called Laparoscopy.

Doctors then puncture the ovary with a small needle carrying an electric current to destroy a small portion of the ovary. This surgery can lower male hormone levels and help with ovulation.

**PCOD (PCOS) Surgery Effects**

- This procedure carries a risk of developing scar tissue on the ovary.
- Surgery effect last for few months only. Instead of choosing surgery, we would recommend you to choose natural path. Go for diet, yoga, exercise and meditation to control

## 2. Conclusion

PCOS is a prevalent endocrine disorder in women that can lead to various health complications. Early diagnosis and effective management strategies, including lifestyle modifications and medical treatments, can help manage the condition and reduce associated risks like infertility, obesity, breast cancer, uterine cancer, depression, mood swings and decreased quality of life

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