

# Polycystic Ovary Syndrome (PCOS)

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# POLYCYSTIC OVARY SYNDROME

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- **Polycystic Ovary Syndrome (PCOS):** an endocrine disorder that has a 7% prevalence rate affecting women between 18–45 years old.
- PCOS is a hormonal imbalance – excess androgens, irregular ovulation, and insulin resistance
  - Common misconception: PCOS simply results in ovarian cysts
  - Leading cause of infertility
- PCOS manifests through a mix signs and symptoms of excess androgen and ovarian dysfunction
- The exact cause remains unknown

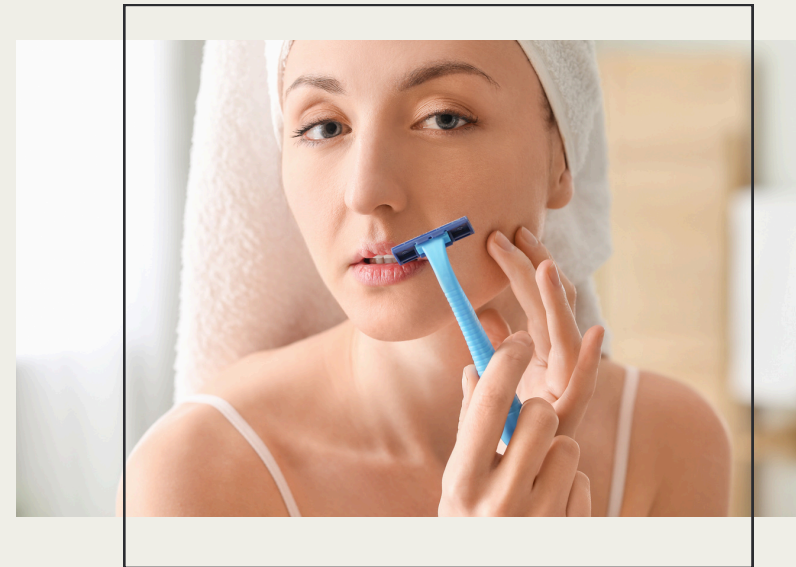
# PCOS SYMPTOMS

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## Abnormal Menstruation

Menstrual abnormalities include missed periods, absent periods, and heavy bleeding.



## Hirsutism

Approximately 70% of people with PCOS experience excessive hair growth on their arms, chest, and/or abdomen.



## Acne

PCOS can result in acne on the face, chest, and back. People with PCOS will often struggle with acne beyond their teenage years.



## Obesity

People with PCOS often deal with weight gain, especially around their belly. About 40-80% of people with PCOS are obese and have difficulties in maintaining a healthy weight.





## Male-Pattern Baldness or Hair Thinning

People with PCOS may experience hair loss and lose patches of hair or start to bald.



## Ovarian Cysts

Many people with PCOS have ovaries with several follicles or appear larger.



## Infertility

Since PCOS can result in irregular ovulation, people with PCOS might experience difficulties in conceiving. PCOS is the leading cause of infertility.



## Darkening of Skin and/or Skin Tags

People with PCOS may experience patches of dark skin in their armpits, folds of their neck, between their legs, or under their breasts. In addition, they might find skin tags on their neck or armpits.

# DIAGNOSIS

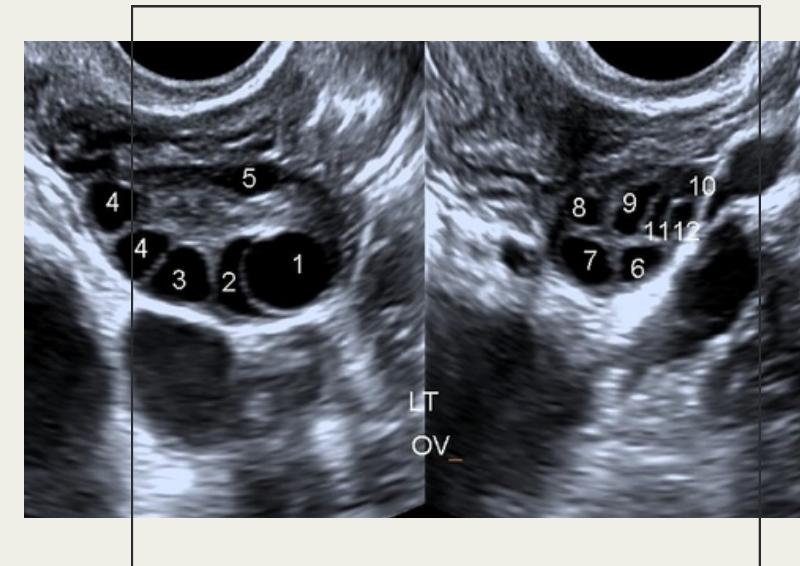
- There is no “PCOS test”
  - Blood tests
  - Ultrasounds
- PCOS diagnosis is based on the Rotterdam criteria- there must be a presence of at least two of the following symptoms



**Signs of Excess  
Androgens**



**Irregular or Absent  
Menstrual Cycles**



**Polycystic Ovaries  
on an Ultrasound**



# TREATMENT

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## Treatment

- Hormonal birth control
  - Helps regulate menstrual cycles, and sometimes improves acne and help with hirsutism
- Insulin-sensitizing medication
  - Metformin- helps control insulin
- Androgen blockers
  - Medications that block androgens can help control hair growth and acne
- Lifestyle changes
  - Maintaining a healthy body weight and eating a nutritious diet can positively affect insulin levels

# PYSCHOLOGICAL IMPACT

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- People with PCOS have an increased risk of developing depression, bipolar disorder, anxiety, and obsessive-compulsive disorder.
  - Anxiety prevalence rate: 28%
  - Depression prevalence rate: 39%
- Changes in physical appearance negatively impacts self-perception
  - Increased risk of developing an eating disorder
  - Loss of feminine identity
- Research suggests that changes in appearance and infertility issues are the primary issues that influence the development of mental disorders among PCOS patients.
- Increased risk of poor sexual functioning
  - Depression & anxiety - psychological risk factors for poor sexual satisfaction and sexual dysfunction
  - Poor body image
  - Infertility

# ASSOCIATED HEALTH RISKS

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## Type II Diabetes

- Insulin resistance makes it difficult to maintain blood glucose levels
- Excess androgen levels increase the risk of diabetes

## Hypertension

- Insulin resistance, obesity, and Type II diabetes are associated with hypertension
- Increased androgen levels increase the risk of elevated blood pressure

## Heart Disease

- Obesity, insulin resistant diabetes, and high blood pressure are associated with cardiovascular disease

## High Cholesterol

- People with PCOS have higher LDL-cholesterol levels, regardless of BMI

## Endometrial Cancer

- The leading reason: prolonged estrogen exposure to the endometrium as a result of anovulation.
- Obesity is a risk factor for endometrial cancer
- Long-term estrogen use



# Thank you!

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