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## Polycystic Ovary Syndrome (PCOS): A Short Review

R. Thamizselvi

<sup>1</sup>Associate Professor, Department of Child Health Nursing, Vivekanandha Nursing College, Gopalankadai, Iyyankuttipalayam, Puducherry 605009

### Abstract:

Polycystic ovary syndrome (PCOS) is a common endocrine and metabolic disorder affecting women of reproductive age worldwide. It is characterized by hyperandrogenism, ovulatory dysfunction, and polycystic ovarian morphology. The condition is associated with significant reproductive, metabolic, and psychological complications. Insulin resistance plays a central role in its pathogenesis, contributing to hyperandrogenism and chronic anovulation. Women with PCOS are at increased risk of infertility, type 2 diabetes mellitus, dyslipidemia, cardiovascular disease, and mental health disorders. Diagnosis is commonly based on the Rotterdam criteria. Management focuses on lifestyle modification, pharmacological therapy for symptom control, and prevention of long-term complications. Early identification and multidisciplinary care are essential to improve health outcomes and quality of life.

**Keywords:** PCOS, endocrine disorder, women

### INTRODUCTION:

Polycystic ovary syndrome (PCOS) is one of the most common endocrine disorders among women of reproductive age, with a prevalence ranging from 6–20% depending on diagnostic criteria. The Rotterdam criteria require at least two of the following: hyperandrogenism, ovulatory dysfunction, and polycystic ovarian morphology, after exclusion of other causes (Rotterdam ESHRE/ASRM-Sponsored PCOS Consensus Workshop Group, 2004).

### PATHOPHYSIOLOGY

PCOS is a multifactorial disorder involving genetic, hormonal, metabolic, and environmental factors. Insulin resistance plays a central role by stimulating ovarian androgen production and reducing sex hormone-binding globulin levels, thereby worsening hyperandrogenism (Dunaif, 1997). Abnormal gonadotropin secretion,

particularly increased luteinizing hormone (LH), disrupts normal follicular development and leads to chronic anovulation (Azziz et al., 2016).

## CLINICAL MANIFESTATIONS

Common clinical features include irregular menstruation, amenorrhea, infertility, hirsutism, acne, and obesity. PCOS is also associated with metabolic abnormalities such as impaired glucose tolerance, type 2 diabetes mellitus, dyslipidemia, and hypertension (Teede et al., 2018). Psychological issues including depression and anxiety are frequently observed.

## MANAGEMENT

Management depends on the patient's symptoms and reproductive goals. Lifestyle modification through weight reduction and regular exercise is the first-line therapy. Combined oral contraceptives are used to regulate menstrual cycles and manage hyperandrogenism. Metformin is prescribed to improve insulin sensitivity. For infertility, ovulation induction agents such as letrozole or clomiphene citrate are recommended (Legro et al., 2013).

## CONCLUSION

PCOS is a complex endocrine-metabolic disorder with significant reproductive and systemic consequences. Early diagnosis and comprehensive management are necessary to reduce long-term complications and improve quality of life.

## BIBLIOGRAPHY:

1. Azziz, R., Carmina, E., Chen, Z., et al. (2016). Polycystic ovary syndrome. *Nature Reviews Disease Primers*, 2, 16057.
2. Dunaif, A. (1997). Insulin resistance and the polycystic ovary syndrome. *Endocrine Reviews*, 18(6), 774–800.
3. Legro, R. S., Arslanian, S. A., Ehrmann, D. A., et al. (2013). Diagnosis and treatment of PCOS. *Journal of Clinical Endocrinology & Metabolism*, 98(12), 4565–4592.
4. Rotterdam ESHRE/ASRM-Sponsored PCOS Consensus Workshop Group. (2004). Revised diagnostic criteria for PCOS. *Human Reproduction*, 19(1), 41–47.
5. Teede, H. J., Misso, M. L., Costello, M. F., et al. (2018). International evidence-based guideline for PCOS. *Human Reproduction*, 33(9), 1602–1618.

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