

HIRSUTISM IN POLYCYSTIC OVARY SYNDROME

Ekta M. Patel¹, Ruby Mathews²

*¹Asst.Professor, Department of Community Health Nursing, Sumandeep Nursing College,
Sumandeep Vidyapeeth Deemed to be University,
Piparia, Waghodia, Vadodara - 391760, Gujarat, India*

*²Under graduate Nursing Student, Sumandeep Nursing College,
Sumandeep Vidyapeeth Deemed to be University,
Piparia, Waghodia, Vadodara - 391760, Gujarat, India*

Corresponding Author

Ekta M. Patel,

*Assistant Professor, Department of Community Health Nursing,
Sumandeep Nursing College,*

*Sumandeep Vidyapeeth Deemed to be University,
Piparia, Waghodia, Vadodara - 391760, Gujarat, India*

E-mail:ekta318@yahoo.com

INTRODUCTION

Polycystic ovary syndrome (PCOS) is a hormonal disorder common among women of reproductive age. Women with PCOS may have infrequent or prolonged menstrual periods or excess male hormone (androgen) levels. The ovaries may develop numerous small collections of fluid (follicles) and fail to regularly release eggs. The exact cause of PCOS is unknown. Early diagnosis and treatment along with weight loss may reduce the risk of long-term complications such as type 2 diabetes and heart disease.¹

PCOS is a syndrome of ovarian dysfunction. Its cardinal features are hyperandrogenism and polycystic ovary (PCO) morphology. Its clinical manifestations may include: menstrual irregularities, signs of androgen excess, and obesity. PCOS is associated with an increased risk of type 2 diabetes.²

DEFINITION

Hirsutism is defined as the presence of terminal hair with male distribution in women, and polycystic ovary syndrome (PCOS) is the most common etiology of hirsutism.²

Polycystic ovary syndrome (PCOS) is an endocrine disorder, afflicting females of reproductive age. This syndrome leads to infertility, insulin resistance, obesity, and cardiovascular problems, including a litany of other health issues.³

CURRENT SCENARIO

PCOS is a polygenic, polyfactorial, systemic, inflammatory, dysregulated steroid state, autoimmune disease, manifesting largely due to lifestyle errors. The advent of biochemical tests and ultrasound scanning has enabled the detection of PCOS in the affected females. Subsequently, a huge amount of insight on PCOS has been garnered in recent times. Interventions like oral contraceptive pills, metformin, and hormone therapy have been developed to bypass or reverse the ill effects of PCOS.³

Lifestyle correction to prevent aberrant immune activation and to minimize the exposure to inflammatory agents, appears to be the sustainable therapy of PCOS. This holistic review with multiple hypotheses might facilitate to devise better PCOS management approaches.⁶

Hirsutism is defined as excessive terminal hair growth in androgen-dependent areas of the body in women, which grows in a typical male distribution pattern. Hirsutism is a common clinical problem in women, and the treatment depends on the cause. The condition is often associated with a loss of self-esteem. Hirsutism reflects the interaction between circulating androgen concentrations, local androgen concentrations, and the sensitivity of the hair follicle to androgens.⁵

The prevalence of hirsutism in PCOS ranges from 70 to 80%, vs. 4% to 11% in women in the general population. Hirsutism in PCOS is associated with both ovarian derived androgen excess and individual sensitivity of the pilosebaceous unit to androgens.⁷

Hirsutism is a clinical diagnosis defined by the presence of excess terminal hair growth (dark, coarse hairs) in androgen-sensitive areas. It affects between five and ten percent of women of

reproductive age. It may be the initial, and possibly only, sign of an underlying androgen disorder.⁴

The most common cause of hirsutism is polycystic ovary syndrome (PCOS). In some cases, hirsutism is mild and requires only reassurance and local (nonsystemic) therapy, while in others it causes significant psychological distress and requires more extensive therapy. In case of rapid progressive hair growth should be first exclude androgen-secreting tumour (ovarian, adrenal) as the most serious condition.⁹

Interventions to decrease hirsutism in PCOS include the suppression of androgen excess by combined oral contraceptives (OCPs). If OCPs are contraindicated, mainly in the presence of insulin-resistance related comorbidities, a second-line option for reducing androgen secretion may be metformin associated with lifestyle changes. Other interventions should be guided by hirsutism severity, determined by the modified Ferriman-Gallwey score, and by the amount of distress hirsutism causes to the patient, and should be maintained for at least 6-12 months. Mild hirsutism is usually treated with a combination of non-pharmacological methods and OCPs, whereas moderate and severe hirsutism may require a combination of antiandrogens and OCPs, or, if OCPs cannot be used, antiandrogens plus a safe contraceptive method. In all cases, strong clinical support is crucial to ensure treatment adherence and success.⁸

CONCLUSION

The understanding of the pathophysiology of hirsutism in PCOS, as well as classifying its severity and the distress it causes to each patient is essential to choose the proper treatment. The presence of metabolic comorbidities and menstrual disturbances will also guide the individualized management of hirsutism in women with PCOS.¹⁰

There is notable discordance in the perception of hirsutism between patients and clinicians; patients view their hirsutism as more severe than clinicians do. Quality-of-life impacts of hirsutism are consistent with that reported for other serious skin conditions. This negative impact is only partially associated with the degree of hirsutism, with self-ratings being more highly associated with quality of life impact than clinician ratings. These results support guidelines recommending that treatment be guided largely by patient distress with hair

growth and subjective perceptions as opposed to clinician judgment of degree. Patient self-rating is critical information for patient-centered care for hirsute patients.¹⁰

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