

Polycystic Ovary Syndrome - An Opportunity To Practice Proactive Preventive Medicine

Polycystic ovary syndrome (PCOS) is recognized as one of the most common endocrine/metabolic disorders of women. This syndrome was first described by Stein and Leventhal in 1935¹. It is the most common cause of infertility in women, frequently becomes manifest during adolescence, and is primarily characterized by ovulatory dysfunction and hyperandrogenism².

A risk factor model analysis has calculated that patients with PCOS have a 4-fold to 7-fold higher risk of myocardial infarction in comparison with age-matched control subjects³. Insulin resistance is present in around 65–80% of women with PCOS, independent of obesity, and is further exacerbated by excess weight⁴. Insulin resistance has been shown to worsen reproductive and metabolic features, type 2 diabetes and cardiovascular disease (CVD) risk in PCOS⁵. The prevalence of obstructive sleep apnoea is increased in obese women with PCOS. Androgen levels and insulin resistance are positively associated with obstructive sleep apnoea in PCOS. Obstructive sleep apnoea contributes to further insulin resistance⁶. Women with PCOS are at a higher risk of developing psychological difficulties (such as depression and/or anxiety), eating disorders and sexual and relationship dysfunction⁷. It has been known for many years that oligo- and amenorrhoea in the presence of premenopausal levels of estrogen can lead to endometrial hyperplasia and carcinoma⁸. There are moderate quality data to support the finding that women with PCOS have a 2.89-fold (95% CI 1.52–5.48) increased risk for endometrial cancer⁹.

The cross-sectional study of 126 infertile women with polycystic ovary syndrome attending the Infertility unit of the Department of Obstetrics and Gynaecology at Bangabandhu Sheikh Mujib Medical University revealed 47.6% of the women were overweight, 39.7%

was obese, 80.2% had waist circumference > 80 cm. Prevalence of insulin resistance was 27.8%, dyslipidemia 93.7%, metabolic syndrome 42.9%. This data warrants need to intensify the lifestyle interventions and appropriate medications to prevent the long-term complications.

In view of the potential for and actual presence of numerous cardiovascular and metabolic risk factors in most women with PCOS, the role of healthcare professionals should be early recognitions of the syndrome, lifestyle intervention to ensure at least 5% weight loss, empathic monitoring, early detection of glucose intolerance, lipid abnormality, blood pressure monitoring, measuring atherogenic markers, treatment with metformin if there is glucose intolerance, statin or fibrate, nonandrogenic OCP, Spironolactone, as need for the best outcome.

(J Bangladesh Coll Phys Surg 2021; 39: 209-210)
DOI: <https://doi.org/10.3329/jbcps.v39i4.55939>

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