

OP-A-18

PCOS IS NOT A RISK FACTOR FOR THE OCCURRENCE OF METABOLIC SYNDROME IN MALAY WOMEN

<https://doi.org/10.15605/jafes.036.S18>

K Hanif K,¹ M Fazliana²

¹Department of Obstetrics and Gynecology, University of Cyberjaya, Cyberjaya, Malaysia

²Endocrinology Division, Institute of Medical Research, Kuala Lumpur, Malaysia

INTRODUCTION

Polycystic ovary syndrome (PCOS) is a common heterogenous endocrine condition previously associated with an increased prevalence of the metabolic syndrome in different ethnic groups and populations. The identification of Malay women with PCOS as high risk for metabolic dysfunction may greatly aid in their management. The primary aim of this study was to compare the prevalences of metabolic syndrome in Malay women with and without PCOS.

METHODOLOGY

This research was part of a cross-sectional clinic-based study of Malay women between February 2013 and June 2018. Eligible women were diagnosed with PCOS using the Rotterdam criteria. The primary outcome was the prevalence of metabolic syndrome as defined by the Joint Interim Statement of the International Diabetes Federation (IDF). Anthropometric, metabolic and hormonal characteristics were also compared.

RESULTS

The study comprised 106 women with PCOS and 121 controls with a mean age of 31.0 ± 7.4 years. The prevalence of metabolic syndrome in the PCOS group (22.9%) and in the control group (33.6%) was not significantly different [$\chi^2(1)=2.093, p=0.148$], even after adjustment for waist circumference (22.1 and 22.9%, respectively). PCOS subjects had higher FAI (median 3.0 versus 2.2, $U=8539, p<0.001$) and free testosterone (median 21.8 versus 19.1 pmol/L, $U=7679, p=0.042$) and lower SHBG (median 53.9 versus 73.6 nmol/L, $U=4832, p<0.001$) levels. All other parameters, including HOMA-IR, and were not significantly different. No relationship was found between insulin resistance and hyperandrogenism.

CONCLUSION

The prevalences of metabolic syndrome in Malay women with and without PCOS were found to be similar. Central obesity was seen to be a risk factor for metabolic syndrome in these women. The lower SHBG levels in PCOS women may be indicative of a role of insulin resistance in the pathogenesis of PCOS and metabolic syndrome.