



The study of the Prevalence of metabolic syndrome in polycystic ovary syndrome sub groups based on Rotterdam criteria and comparison with the control group.

Zaeem Zadeh N. (MSc)¹⁷

Ziaei S. (MD)*

Kazem nejad A.

Department of Reproductive Health, Tarbiat Modarres University, Tehran, Iran

Abstract

Background: Polycystic ovary syndrome (PCOS) is the most common endocrine disorder in childbearing aged women in Iran which has relatively high prevalence. The risk of metabolic syndrome (Mts) in women with PCOS compared with healthy women, is more than 2 times. Mts increase the complications associated with PCOS for example: Impaired glucose tolerance, diabetes, hypertension and hyperlipidemia. High prevalence of the metabolic syndrome has shown in PCOS women, in various studies. The aim of this study was to determine the prevalence of Mts in PCOS subgroups based on Rotterdam criteria and comparison with the control group.

Materials and Methods: This case-control study was conducted by available sampling method on 166 patients eligible for the study. Subjects were classified according to the Rotterdam criteria as follows: 38 people were in the group A, 27 people: group B, 43 people: group C, 29 people: group D and 29 people in control group (without any PCOS). Mts was measured based on NCEPATPIII scoring. Statistical analysis was performed using SPSS software and chi-square test.

Result: Prevalence of metabolic syndrome in PCOS subgroups was as follows: (A = 18.4%), (B = 3.7%), (C = 4.7%), (D = 13.8%) and (control = 0%). A statistically significant difference between groups was observed (P= 0.03).

Conclusion: Prevalence of metabolic syndrome in the group A, is higher than other subtypes and indicate their metabolic deterioration. Mts prevalence in each phenotypes of PCOS, is higher than the control group and this is important in terms of increased risk of heart disease and diabetes. Given the high prevalence of Mts in women with PCOS, Mts screening in PCOS patients is necessary in order to prevention of such risks.

Keyword: Metabolic syndrome, PCOS

¹⁷ Narges Zaeem Zadeh. M.Sc.

Email: Ngs.zaim@gmail.com

*Corresponding author:

Email: Ziaei_Sa@modares.ac.ir

Address: Department of Midwifery, Tarbiat Modarres University, Ale-Ahmad Highway, Tehran