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TITLE

THE EFFECT OF CONCENTRATION OF ANTI - MLLERIAN HORMONE (AMH) ON THE DEVELOPMENT OF METABOLIC DISORDERS IN WOMEN WITH POLYCYSTIC OVARY SYNDROME (PCOS).

AUTHOR/S

Maksym M (PL) [1], Pluta D (PL) [2], Kowalczyk K (PL) [3], Franik G (PL) [4], Madej P (PL) [5]

ABSTRACT

CONTEXT:

AMH concentration can affect the occurrence of metabolic disorders in women with PCOS and their nutritional status. Obese PCOS women have a lower concentration of AMH, and that it is inversely proportional to the percentage of fat in the body.

OBJECTIVE:

The aim of the study was to evaluate the relationship between AMH, glucose and insulin serum concentrations, lipid profile parameters, and HOMA-IR values depending on nutritional status in PCOS.

METHODS:

PCOS was diagnosed by the presence of all three Rotterdam criteria. Nutritional status was assessed using WHO guidelines.

PATIENTS:

The study group consisted of 76 women with PCOS (41 obese) and 67 women without PCOS (40 obese).

INTERVENTIONS:

Blood for analysis of hormonal and lipid profile, glucose, insulin, and AMH was taken after 12 hours of fasting in the fifth day of the menstrual cycle. Anthropometric measures were taken. Assessment of nutritional status was based on the measurement of BMI.

MAIN OUCOME MEASURES:

Concentrations of hormones, glucose, AMH and lipid profile was performed.

RESULTS:

AMH concentrations was significantly higher in the group with than without PCOS and significantly lower in obese than in normal weight groups. It was significantly higher in lean than obese PCOS women and both groups without PCOS. However, AMH concentration was also significantly higher in obese PCOS women than both groups without this diagnosis. AMH concentration was significantly higher in lean women than obese without PCOS. HDL concentration was inversely related to the waist and AMH concentrations.

INSTITUTE

[1] Department of Gynaecological Endocrinology, Medical Faculty in Katowice, Medical University of Silesia, Katowice, Poland, [2] Department of Gynaecological Endocrinology, Medical Faculty in Katowice, Medical University of Silesia, Katowice, Poland, [3] Department of Gynaecological Endocrinology, Medical Faculty in Katowice, Medical University of Silesia, Katowice, Poland, [4] Department of Gynaecological Endocrinology, Medical Faculty in Katowice, Medical University of Silesia, Katowice, Poland, [5] Department of Gynaecological Endocrinology, Medical Faculty in Katowice, Medical University of Silesia, Katowice, Poland

CONCLUSIONS:

AMH does not affect the carbohydrate metabolism but has an effect on the occurrence of lipid abnormalities in PCOS. HDL cholesterol is inversely dependent on the AMH concentration, which affects the increased of cardiovascular risk.