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P23. Effect of hiperandrogenism on the lipid profile on women with polycystic ovary syndrome at the endocrine gynecology clinic of the hospital juárez de méxico

C Villegas Rodríguez (MX) [1], L Valle Molina (MX) [2], M Á Bedoya Osorio (MX) [3], G Carranza Escalera (MX) [4], M D Flores Fuentes (MX) [5], I Hernández Marín (MX) [6]

Context. Polycystic ovarian syndrome (PCOS) is the most common endocrine-metabolic pathology in women in a reproductive age. Its pathophysiology is multifaceted and its effects over the cardiovascular health is described. Progression of the atherosclerotic process and dyslipidemia as a pyramidal phenomenon are relevant. Hyperandrogenism and lipid metabolism are closely related, however the effect on the lipid panel is debated.

Objective. To evaluate the effect of hyperandrogenism on serum lipid levels [total cholesterol (cT), high density lipoprotein (cHDL), low density lipoprotein (cLDL), very low density lipoprotein (cVLDL), triglycerides (TG), non-HDL cholesterol (cNO-HDL) and Castelli's atherogenicity index (IA)] in young women with PCOS.

Methods. Prospective, longitudinal, analytical study. Statistical analysis included Chi square tests, Pearson's R-correlation, Student T test, and contingency tables.

Patients. 55 patients with PCOS in reproductive age obtained by statistical formula were evaluated.

Interventions. Patients were subdivided into groups according to the presence of excess in clinical and/or biochemical androgens.

Main outcome measurements. Ferriman Gallwey Scale, total testosterone, ?4 androstenedione, dehydroepiandrosterone (DHEA), dehydroepiandrosterone sulfate (DHEA-S), free testosterone (TL), cT, cHDL, cLDL, cVLDL, TG, cNo-HDL and IA.

Results. Mean age 24.47 years. Clinical and biochemical hyperandrogenism occurred in 81.2% and 68% of the cases respectively. The increase in ?4 Androstenedione was the most frequent biochemical expression (61.8%). Hyperandrogenemia caused an increase in the mean of: cT(16mg/dl), cLDL(4mg/dl), TG(25mg/dl), cVLDL(6mg/dl) and decrease in cHDL mean (3a4mg/dl). Hyperandrogenism was significantly correlated with a cLDL increase and cHDL decrease. Hyperandrogenemia was significantly correlated with a cT increase. ?4 androstenedione was positively correlated with cT, TG and negatively with cHDL, generating risk for elevation of: cT [OR 5.182 (95% CI 1.028-26.130)], TG [OR 4.038 (CI 95% 1,250-13,045)], and cVLDL [OR 5, 867 (95% CI 1,722-19,991)]. Total testosterone was positively correlated with cLDL and IA, and generated a risk for cHDL reduction [1,441 (IC 95% 1,197-1,736)] and elevation of: LDL [1,960 (95% CI 1,490-2,579)] and AI [2,333 95% CI 1.689-3.224)].

Conclusions. The excess of androgens generates a significant deterioration of lipid levels, with a characteristic atherogenic profile of PCOS

[1] Hospital Juárez de México, [2] Hospital Juárez de México, [3] Hospital Juárez de México, [4] Hospital Juárez de México, [5] Hospital Juárez de México, [6] Hospital Juárez de México