

Frequency of Fatty Liver Disease in Polycystic Ovary Syndrome patients by phenotype A, B, C and D in the clinic of Endocrine Gynecology of the “Hospital Juárez de México”

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

Introduction. Fatty liver disease (FLD) is a marker of cardiovascular disease, very prevalent in patients with Polycystic Ovary Syndrome (POS) where around 30% of all individuals present it even without other risk factors. In obese patients Kelley et. al. have reported that this can increase to a 70- 95% of patients. To our knowledge there are no studies evaluating the relationship between POS phenotype and FLD, making it an important area of research.

Objective. To determine the frequency and probability of FLD, according to POS phenotype.

Methods. We did a 6 month, prospective, observational, cohort study, where the frequency and probability of FLD per phenotype using hepatic elastography was calculated.

Patients. 92 patients were recruited after calculation with the infinite population formula, from the department of Endocrine Gynecology of the “Hospital Juárez de México” previously diagnosed with POS (Rotterdam 2003). The patients were divided according to POS phenotype (A, B, C, D) until completion of 23 patients per group.

Interventions. All patients underwent an endocrine evaluation which included an androgen, lipid, hepatic and metabolic profile, pelvic ultrasound and hepatic elastography.

Main Outcome Measure. Fatty Liver Disease determined as >220 decibels/meter through elastography.

Results. FLD prevalence was 95.7% (RR 1.3 p=0.03) in phenotype A, 86.9%, (RR 1.3 p=0.5) in phenotype B, 86.9% (RR de 1.1 p=0.5) in phenotype C and 72.7% (RR 0.5, p=0.001) in phenotype D, in patients with phenotype A the disease was the most severe. The RR of having FLD in a patient with POS was 1.2 (p=0.06).

Conclusions. Patients with POS had a greater frequency of FLD, ranging from 72 to 95%, phenotype A had the greatest frequency and probability of FLD, while phenotype D had the lowest. This suggest that patients with A phenotype must have a specially thorough evaluation of their metabolic risk.

[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

