1. A cross-sectional study of the association between the 1-hr oral glucose tolerance test and the metabolic syndrome in a high-risk sample with impaired fasting glucose.

(Un estudio transversal de la asociación entre la prueba de tolerancia a la glucosa oral de 1 hora y el síndrome metabólico en una muestra de alto riesgo con glucosa en ayunas alterada)

INVESTIGADORES: Lizarzaburu-Robles JC, Torres-Aparcana L, Mansilla R, Valera J, Vento F, Laca J, Cornetero V, Vargas G, Herman WH.

REVISTA: Endocr Pract. 2020 Jan 22. doi: 10.4158/EP-2019-0387.

ABSTRACTO: OBJECTIVE: The aim of this study was to evaluate the association between the 1-hr oral Glucose tolerance test (OGTT) (≥155 mg/dl) and metabolic syndrome (MS) in a sample with previous impaired fasting glucose (IFG). METHODS: 324 Peruvian subjects with a history of IFG ≥100 mg/dl were selected for a cross-sectional study. They underwent a 75g OGTT and were assigned to different groups according to the result. We evaluated the association between 1-hr OGTT and MS. RESULTS: The mean age was 56.5 ± 12.6 years and 191 (61.5%) were female. During the OGTT, we found 28 (8.6%) subjects with diabetes, 74 (22.8%) with IGT and 222 (68.5%) with a normal glucose tolerance test with 2-hr glucose <140 mg/dl (NGT). In the NGT group, 124 (38.3%) had 1-hr glucose levels <155 mg/dl, while 98 (30.2%) had 1-hr glucose levels ≥155 mg/dl. Evaluating the association between the 1-hr value in the OGTT and MS, we found that subjects with 1-hr glucose ≥155 mg/dl were more than twice as likely to have MS as those with 1-hr glucose <155 mg/dl. (OR= 2.64, 95% CI: 1.52-4.57). In addition, body mass index (BMI), fasting glycemia, triglycerides, and waist circumferences were significantly higher in subjects with 1-hr glucose levels ≥155 mg/dl compared to those with 1-hr glucose levels <155 mg/dl (p <0.05). CONCLUSION: Among subjects with IFG, performing an OGTT was helpful to identify subjects with 1-hr glucose levels ≥155 mg/dl and NGT who were significantly more likely to have MS and a worse cardiometabolic risk profile.