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214 - REGRESSION FROM PREDIABETES TO NORMOGLYCEMIA IN SUBJECTS AT HIGH RISK OF TYPE 2 DIABETES

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Resumen

Introduction: Prediabetes state carries risk of cardiometabolic complication but also would define a risk state by itself. The regression of prediabetes to normoglycemia is accompanied by an improvement in cardiometabolic risk-factors. We evaluated the regression to normoglycemia (RNG) from prediabetes state in a high-risk sample at two hospitals, in Perú and Spain.

Methods: 477 patients with Impaired Fasting Glucose (IFG), were selected. 264 of them were able to complete a 5-year follow-up after performance an OGTT. IFG and/or HbA1c defined prediabetes, after OGTT, according to the American Diabetes Association. Prediabetes regression was considered if Fasting glucose < 100 mg/dl and HbA1c < 5.7% after follow-up. We describe the frequencies and associations using Student's t-test and χ^2 test. Odds ratio (OR) was estimated using logistic-regression with IC95%s.

Results: Mean-age was 57 ± 11.4 and 67.8% were female. 43 subjects (16.3%) RNG, 142 (54%) remained in prediabetes and 78 (29.7%) progress to T2DM. We found a significant differences in basal glycemia (BG), basal-HbA1c, BMI and creatinine measurement when we compare the final status of the three groups at the end of the follow-up ($p < 0.001$, $p = 0.030$, $p = 0.018$ and $p = 0.021$ respectively). However, when comparing patients who RNG with those who remain in prediabetes, the significance was only in BG ($p = 0.024$). Finally, by logistic-regression analysis, we found positive association in the RNG group compared to those who did not, for BMI (OR 1.07, 95%CI (1.65-5.88); $p = 0.047$) and basal glomerular filtration rate (CKD-EPI) (OR 1.47, 95%CI (1.04-2.20); $p = 0.008$).

Conclusions: Several heterogeneous individual characteristics may contribute to the regression to normoglycemia in people with prediabetes. However, according to our results, BMI and CKD-EPI may are potential determinants of regression to normoglycemia in high-risk individuals with any specific intervention.