

## Endocrinología, Diabetes y Nutrición



## 83 - ANALIZANDO LA RELACIÓN ENTRE VARIABILIDAD GLUCÉMICA A LARGO PLAZO Y FACTORES PSICOLÓGICOS EN DM1 (PÓSTER SELECCIONADO)

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## Resumen

Introduction: anxiety, depression, and disease related distress (DRD) are linked to glycaemic control and complications in type 1 diabetes (T1D). Glycaemic variability might play a role. We aim to evaluate if anxiety, depression or DRD are linked to long-term glycaemic variability in T1D.

Methods: 411 participants from a previous study with T1D were enrolled. Exclusion criteria: pregnancy, age 14y, inability to complete study dossier, 6 HbA1c measurements in the previous 6 years or not being actively followed. Scores for Spanish version of the Hospital Anxiety and Depression Scale (HADS) and Problem Areas in Diabetes scale (PAID) were obtained. Demographics, clinical data, education level and employment situation were obtained. Long-term glycaemic variability was measured as variation coefficients of HbA1c (VCs) in the previous 6 years. Descriptive and basic inference analysis and multivariate regression were performed. Data was analysed with R package version 3.6.1. Informed consents were obtained. The study was approved by an Ethics and Investigation Committee.

Results: Group average age was  $35.5 \pm 13.0$ y. 240 (58.4%) participants were females. Median T1D evolution time was 16y (IQR 10-24). Women had higher scores in HADS for anxiety (p 0.002). Women had higher scores in PAID (p .001). After multivariate analysis: none or primary studies, anxiety and DRD had a significant and positive relation with the VCs. Unemployment had a significant and negative relation with the VCs. Age and T1D evolution had a non-linear relation with VCs.

Conclusions: There is a relationship between psychological factors and glycaemic variability in T1D. Our multivariate model reflects that anxiety and DRD are significant at increasing long-term glycaemic variability. These, alongside study level, employment, age and T1D evolution were relevant variables to predict glycaemic variability. No significant relationship was found between depression and glycaemic variability.