RESULTS OF THE MULTI-CENTRIC STUDY RENACED DIABETES TIPO 1 IN MEXICO

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BACKGROUND AND AIMS

Information regarding type 1 diabetes (T1D) patients' follow-up in Mexico is limited. An online- system, RENACED DT1, registers longitudinal T1D data in Mexico.

METHODS

Descriptive analysis of 894 T1D patients registered on RENACED DT1, in 17 Mexican States, until 10/8/2017.

RESULTS

Fifty percent of the patients were diagnosed in the last 10 years, 530 patients were women (59.3%) and 364 patients were men (40.7%). The average age of diagnosis was 12.5 years, being men 2 years younger than women (11.78 vs. 13.02) at diagnosis (p=0.0289) (Image 1).

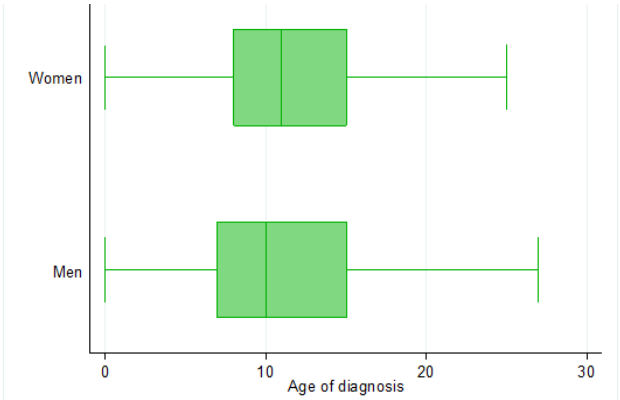

Image 1: Patients age at diagnosis by sex

At the time of the analysis, 860 patients remain active, 40% men (M) and 60% women (W), with a ratio W:M of 1.5. Of this, 58% were being taken care in 3 states: Jalisco, Mexico City and Nuevo Leon.

The average age was 24.6 years old (yo), being women significantly (p=0.0268) older than men (25.4 vs. 23.4); nevertheless, 50% of the active patients were younger than 22 yo (Image 2).

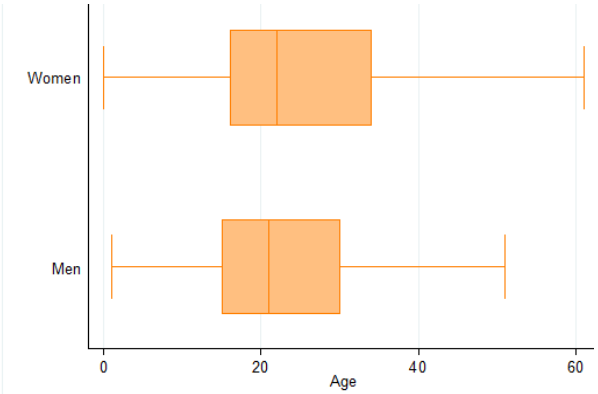

Image 2: Patients current age by sex

Twelve percent have family history of T1D and 57.5% of T2D.

Mean BMI of active patients was 22.3 Kg/m^2 (n=679) with no significant differences between men (22.2 Kg/m^2) and women (22.4 Kg/m^2); and a mean HbA1c of 8.5% (n=617), without significant differences between men (8.4%) and women (8.6%).

38.1% performs SMBG (self-monitoring of blood glucose) ≥4 times/day, 23% are on insulin-pumps and 66% are on basal-bolus regimen by injections.

Patients that perform SMBG ≥4 times/day, had lower HbA1c levels (8.08; CI95% 7.9–8.3) than those that monitor less (8.7; CI 95% 8.4–8.9) (p<0.05) (Table 1).

Table 1. Times of SMBG vs. HbA1c	
≥4 times/day	8.08 (7.9-8.3)
<4 times/day	8.7 (8.4-8.9)

A lower **HbA1c level** (<0.05) was observed in patients that used a **continuous glucose monitor** (CGM) **(8.0; CI 95% 7.5–8.5)** than in those who did not **(8.8; CI 95% 8.5–9.0).** A total of **20.9%** and 12.1% of patients had **HbA1c <7%** and 7<7.5%, respectively.

The presence of mild/moderate hypoglycemia was high (74.6%), as well as that of severe hypoglycemia (26.3%), the presence of chronic complications was 12.2%. (Image 3)

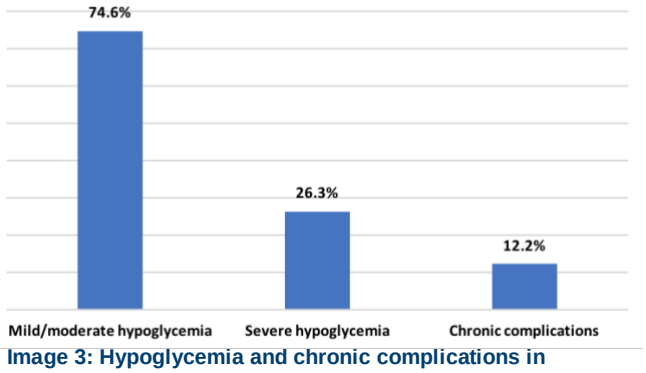

Image 3: Hypoglycemia and chronic complications in active patients

CONCLUSIONS

The percentage of T1D patients in Mexico that reach the HbA1c target is low (20.9 % <7% and 33% < 7.5%), but similar to what is described in the literature. Improved glucose monitoring technology, insulin delivery systems and adjunctive therapy for T1D will hopefully help improve glycemic control in T1D patients.

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