and hematologic (20%). Patients with remission of disease (SLEDAI-2K = 0; no clinical or laboratory manifestations of SLE) at conception had significantly lower rates of flares than those not in remission (18.49–37% vs. 43.70–61%; p = 0.008) (Figure 1).

Patients who experienced a flare during pregnancy (17 patients), when compared to those who did not, had higher rates of flares during follow-up (76% vs. 47%, respectively, p = 0.019), lower time for first flare (4.4 ± 2.3 months vs. 10.3 ± 6.5, respectively, p = 0.001), lower rate of remission of disease at conception (12% vs. 46%, respectively, p = 0.001) and lower rates of exclusive breastfeeding (24% vs. 57%, respectively, p = 0.001). Remission of disease and flares during pregnancy remained significantly associated with the development of flares during follow-up after multivariate analysis.

Conclusion: Remission at conception can influence SLE disease positively, even at long-term. Planned pregnancy counseling is fundamental when managing SLE patients.

REFERENCES:

Disclosure of Interests: None declared

AB0459 NATIONAL TEMPORAL TRENDS IN ALL-CAUSE MORTALITY IN PATIENTS WITH SYSTEMIC SCLEROSIS IN MEXICO BETWEEN 1998-2017

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Background: Systemic sclerosis (SSc) is a rare chronic connective tissue disease characterized by vascular injury, immune dysregulation, and extensive fibrosis of several organs. Due to its rarity, epidemiological data for SSc are sparse. Objectives: To investigate national temporal trends over time in all-cause mortality rates in patients with systemic sclerosis (SSc) in Mexico between 1998 and 2017. Methods: All-cause deaths between 1998 to 2017 were extracted from the General Board of Health Information (DGIS) Open Access datasets. We identified all persons aged ≥18 years with a diagnosis of SSc (ICD-10 code M34). We calculated the age-standardized mortality rate (ASMR) for SSc and non-SSc (information provided by the National Institute of Statistics, Geography and Informatics). A Joinpoint regression model was used to determine mortality trends by sex and geographic regions. Annual percentage change (APC) and average APC (AAPC) were calculated using Joinpoint analysis.

Results: From 1998 to 2017, the overall ASMR of SSc increased (AAPC = 2.5%), whereas the ASMR for non-SSc remained stable. By subpopulations, females and males with SSc had a significant uptrend in the ASMR (AAPC = 4.6% and 4.4%, respectively), between 1998 and 2008 for the former and between 1998 and 2010 for the latter. Females had a non-significant ASMR uptrend and males a non-significant ASMR decline. Some variations among geographic regions were found. Women had a higher SSc ASMR to non-SSc ASMR ratio than males. The relative cumulative change between 1998 and 2017 differed between females (78.1%) and males (50.8%), and residents of the Southern region had the largest cumulative change (147.8%).

Conclusion: SSc mortality rate increased in Mexico between 1998 to 2017, with SSc mortality higher than non-SSc mortality with variations by sex and geographic regions.

REFERENCES:

Disclosure of Interests: None declared

AB0460 METABOLIC PROFILE OF INSULIN RESISTANCE IN NON-DIABETIC WOMEN WITH SYSTEMIC LUPUS ERYthematosus

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Background: Systemic lupus erythematosus (SLE) is associated with an increased risk of insulin resistance (IR). Metabolomics offers an opportunity to examine markers of IR and their relationship with SLE. Objectives: 1) to compare the metabolomic profile of IR in SLE patients and controls; 2) to correlate the metabolomic profile with other IR surrogates and 3) to evaluate the relationship between the metabolomic profile of IR and SLE disease variables, vitamin levels and subclinical atherosclerosis in patients with SLE.

Methods: In this cross-sectional analysis, serum samples were collected from patients with SLE (n = 64) and gender- and age-matched controls (n = 71). Serum metabolomic profiling was performed using ultra-high-performance liquid chromatography and tandem mass spectrometry (UPLC-MS-MS). Homeostasis model assessment (HOMA) and the quantitative insulin sensitivity check index (QUICKI) were also carried out. Serum 25(OH)D concentrations were assessed by chemiluminescent immunoassay. Carotid IMT was quantified by ultrasound.

Results: In non-diabetic patients with SLE, the metabolomic Quantose score significantly moderately correlated with HOMA-IR, HOMA2-IR and QUICKI. Although levels of IR metabolites did not differ between SLE patients and controls, fasting plasma insulin levels were higher and insulin sensitivity lower in SLE patients. The Quantose IR score was significantly correlated with complement C3 levels (r = 0.7; p = 0.001). Neither 25 (OH)D concentrations were assessed by chemiluminescent immunnoassay. Carotid IMT was quantified by ultrasound.

Conclusion: This exploratory study found that Quantose IR may be a useful tool for IR assessment. There was a possible correlation between the metabolomic profile and complement C3 levels. The implementation of this metabolic strategy may help develop biochemical insight into metabolic disorders in SLE.

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