idant activity were overexpressed in the treated group compared to HFD group. On the contrary, 52 genes involved in lipid and collagen biosynthesis and inflammatory response were downregulated.

Conclusions: Prolonged-release pirfenidone decreased miR-21a-5p expression, miR-34a-5p and miR-103-3p expression showed a tendency to decrease. PR-PFD exhibited an anti-steatogenic, anti-inflammatory and anti-fibrotic effect in the experimental model of NAFLD/NASH.

Conflicts of interest: The authors have no conflicts of interest to declare.

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Clinical and epidemiological characteristics of patients with autoimmune hepatitis in a center of Northeast Mexico

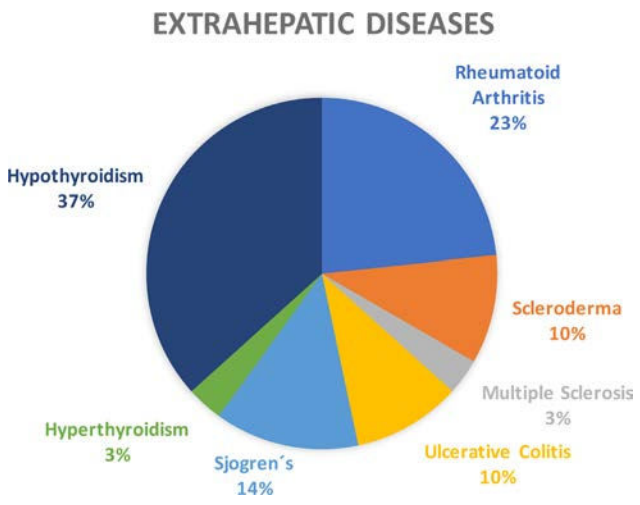
A.L. Kuljacha-Gastélum, P.A. López-Hernández, M.A. Cornejo-Gutiérrez, V.E. del Toro-Ortiz

Gastroenterología, Instituto Mexicano del Seguro Social, Monterrey, Nuevo León, México

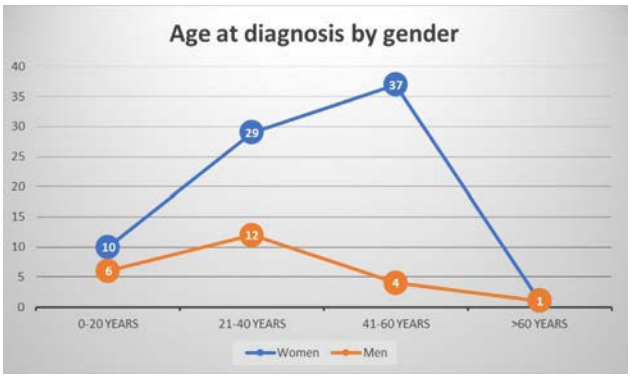
Background and aim: Autoimmune hepatitis (AIH) is a very heterogeneous disease with an impact on the morbidity and mortality of patients, which affects all ages, genders, and ethnic groups. It can present either asymptomatically, such as acute hepatitis, cirrhosis, or acute liver failure. Aim: To describe the demographic, biochemical and clinical characteristics of patients with HAI, due to the few epidemiological data that exists in Latin America.

Material and methods: A retrospective cohort study was conducted that included patients with HAI attended at the Northeast National Medical Center of the IMSS (Monterrey, Nuevo León). The information was collected from the digital file between March 01, 2019 to April 01, 2020.

Results: A total of 100 patients, 77% female, with an average age at diagnosis of 37 years were included (Graph 1). In the presentation form, 38% were cirrhotic at diagnosis, 2% debuted with acute liver failure, 16% with acute hepatitis, and 44% with asymptomatic abnormal liver tests. Regarding autoantibodies, 75% had positive antinuclear antibodies (ANAs) or smooth muscle antibodies (ASMA). 25% associated autoimmune extrahepatic diseases (Graph 2), and 46% fulfilled criteria for Overlap Syndrome, mostly primary biliary cholangitis (CBP). Regarding treatment, 40% were considered refractory to conventional therapy, meriting the use of



Graph 1. Age at diagnosis by gender ($N = 100$).



Graph 2. Associated extrahepatic diseases.

other immunosuppressors (mycophenolic acid and tacrolimus). Of the total of patients, 32% had received Orthotopic Liver Transplantation (THO).

Conclusions: Autoimmune hepatitis in our population behaves similarly to that described in the world literature, with a greater association to overlap syndrome and refractory treatment, perhaps because it is a reference center.

Conflicts of interest: The authors have no conflicts of interest to declare.

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Pirfenidone induces epigenetic changes modulating the activity of the ppargamma-SIRT1-DNMT1 axis in hepatic stellate cells

H.C. Monroy-Ramírez, M. Galicia-Moreno, A. Santos-García, J.S. Armendáriz-Borunda

Centro Universitario de Ciencias de la Salud, Universidad de Guadalajara, Facultad de medicina, Tec de Monterrey, Campus Guadalajara, México

Background and aim: The role of epigenetic changes in liver diseases has been described through abundant experimental evidence, highlighting the de-acetylation in residue lysine 9 of histone H3 (H3K9) regulated by SIRT1 (NAD-dependent deacetylase), and methylation of promoters of genes involved in fibrogenic response regulated by DNA-Methyl transferase 1 (DNMT1). Our research group characterized the regulation of pirfenidone (PFD) on PPARalpha/gamma-SIRT1 axis in two experimental animal models: (1) NASH and (2) hepatocarcinoma. The objective of this work was to characterize the changes in the acetylation/de-acetylation of H3K9 induced by PFD treatment in hepatic stellate cells (HSCs), in addition to analyzing the global methylation patterns

Material and methods: HSCs were treated with PFD (500 μM), SIRT172 activator (20 μM) and inhibitor EX527 (80 μM) of SIRT1 for 24 hrs. Subsequently, changes in the expression of SIRT1 and DNMT1 were analyzed by western blot. Immunofluorescence was carried out using markers that detect H3K9 acetylation and global methylation (5MeC; 5Metyl-Cytosine), images were captured with a confocal microscope in order to visualize the cellular co-location of proteins.

Results: The western blot shows that the treatments with PFD and SIRT1720 treatments increase the expression of SIRT1 and DNMT1 proteins, while EX527 reduces them. Immunofluorescence demonstrated that PFD and SIRT1720 decrease the acetylation of H3K9, but increase overall methylation; contrarily, treatment with