

Disease; **n/a**, not available; **TE**, Transient elastography. a. Mann-Whitney U test. b. Pearson's Chi-squared test.

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#### P-48 EVALUATION OF IL-1 $\beta$ AND IL-1RA IN PATIENTS WITH CHRONIC LIVER DISEASES

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**Introduction and Objectives:** IL-1 $\beta$  is a proinflammatory key cytokine that participates in the progression of liver disease. Its antagonist IL-1RA mediates damage limitation; its increase is associated with positive effects on chronic liver diseases. This study aimed to evaluate the concentration of IL-1 $\beta$  and IL-1RA in subjects with alcoholic liver disease (ALD), chronic hepatitis C (CHC) and non-alcoholic fatty liver disease (NAFLD).

**Materials and Methods:** A cross-sectional and multicenter study was carried out, which included alcoholic subjects (OH), alcoholic cirrhosis (CiOH) and alcoholic hepatitis (HA); patients with CHC and NAFLD were compared against subjects without criteria for alcohol drinking habits (CT). IL-1 $\beta$  and IL-1RA were quantified by Multiplex-MERCK®. For statistical analysis, SPSS V.22 were used, Mann-Whitney U,  $p < 0.05$ ; values expressed as mean  $\pm$  standard error.

**Results:** The groups included were: 18 (OH), 25 (CiOH), 14 (HA), 55 (CHC), 22 (NAFLD) and 81 (CT). IL-1 $\beta$  results (pg/mL): 13.8 $\pm$ 9.2, OH; 4.4 $\pm$ 1.7, CiOH; 3.05 $\pm$ 0.05, HA; 7.1 $\pm$ 2.3, CHC; 5 $\pm$ 2, NAFLD and 3.2 $\pm$ 0.1, CT. With differences in HA vs. CHC. For IL-1RA (pg/mL) 83.5 $\pm$ 30, OH; 100.4 $\pm$ 53.5, CiOH; 85 $\pm$ 38.3, HA; 74.4 $\pm$ 2, CHC; 316 $\pm$ 203, NAFLD and 13.02 $\pm$ 4.4, CT. With differences in CHC and NAFLD vs. CT and CiOH vs. CHC.

**Conclusions:** IL-1 $\beta$  was 2.3 times increased in HA/CHC, which highlights the effect on exacerbating the inflammatory response in acute over chronic alcohol damage; IL-1RA that inhibits the activities of IL-1 $\beta$  increase may have protective effects on liver injury. IL-1RA is a protein that limits inflammation in liver disease, especially in non-alcoholic fatty liver disease, alcoholic cirrhosis, and chronic hepatitis C.

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#### P-49 CONCENTRATION OF IL-12 AND CXCL-10 IN CHRONIC LIVER DISEASES

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**Introduction and Objectives:** Chronic liver diseases are characterized by persistent inflammation related to high production of cytokines such as IL-12 and chemokine CXCL-10/IP-10 that attract activated Th1 lymphocytes that increase the production of IFN- $\gamma$  and TNF- $\alpha$ , perpetuating the inflammatory cascade. This study aimed to compare serum levels of IL-12 and CXCL-10 in different etiologies of liver disease.

**Materials and Methods:** A cross-sectional and multicenter study was carried out, including subjects with alcoholism according to criteria WHO, without (OH) and with liver injury (cirrhosis, CiOH) and (Alcoholic Hepatitis, HA); non-alcoholic fatty liver (NAFLD) and chronic Hepatitis C (CHC), diagnosed by clinical, biochemical data. They were compared with control subjects (CT). For determination of IL-12 and CXCL-10 with Multiplex®-MERCK®. Statistical analysis by SPSS V.22 using U de Mann Whitney,  $p < 0.05$ ; values expressed as mean  $\pm$  standard error.

**Results:** Included 20 subjects with NAFLD, 78 CHC, 14 HA, 20 CiOH, 15 OH y 60 CT. IL-12 was found elevated in OH, HA, CHC vs. CT in OH vs. HCc y HGNA ( $p \leq 0.05$ ). CXCL-10 was found elevated in CiOH, HA, and CHC vs. CT ( $p \leq 0.050$ ).

**Conclusions:** The IL-12 showed elevated levels in subjects with alcohol consumption and CHC vs. CT that activates other cell types involved in inflammation. CXCL-10 is induced by IFN- $\gamma$  and was found elevated in CiOH, HA and CHC, exerting their biological effects through CXCR3, including activation of peripheral immune cells and apoptosis. The ratio of IL-12/CXCL-10 in OH increased 4.6 times, ratifying the participation in chronic and continual inflammatory response by alcohol consumption. IL-12 and CXCL-10 have an important role in alcohol-induced liver disease, confirming their contribution to inflammation, being evident in CXCL-10 in advanced stages of the disease by stimulating and favoring the migration of immune cells to the damage sites.

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#### P- 50 SEROPREVALENCE OF HEPATITIS E VIRUS IN HIV-INFECTED PATIENTS FROM ROSARIO, SANTA FE

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**Introduction and Objectives:** Although HEV infection is asymptomatic or self-limiting in most individuals, in immunocompromised patients, such as those infected with HIV, viral replication can persist for more than three months leading to chronic infection with progression to cirrhosis. Argentina is considered a country with low endemicity for HEV; however, seroprevalence data in HIV-infected populations are scarce and, to date, there are very few reports that provide accurate information on the impact of HEV infection in these immunosuppressed patients in our region. This study aimed to evaluate the prevalence of HEV infection in HIV-positive individuals from Rosario, Santa Fe.

**Materials and Methods:** We evaluated 97 HIV-positive individuals (19-74 years old; male=64) from Rosario. A blood serum sample was obtained from each patient after written informed consent. IgG and IgM a-HEV were analyzed by ELISA and HEV RNA by the RT-qPCR method previously optimized in our laboratory. As a control group, 154 blood donors (18-62 years old; male=90) were studied.

**Results:** The results indicate a seroprevalence of IgG a-HEV of 5.2% (5/97) in HIV individuals compared to 3.2% obtained in the control population ( $p>0.05$ ). These five positive samples corresponded to male individuals and all were negative for IgM a-HEV. HEV RNA was not detected in any of the 97 samples tested, ruling out acute HEV infection

**Conclusions:** The results indicate a higher prevalence of IgG a-HEV in the HIV-positive population compared to the control group. The absence of HEV RNA in all the samples analyzed allows discarding active infections that can course with negative serology in this particular group of immunosuppressed individuals. This work provides updated data on the seroprevalence of IgG a-HEV in populations at risk, such as HIV-positive patients from our region.

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#### P- 51 HEALTH EDUCATION AND SEROPREVALENCE OF HEV IN RURAL AND PERI-URBAN POPULATION, WITH AGRICULTURAL ACTIVITY IN BAHIA – BRAZIL - PRELIMINARY DATA

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**Introduction and Objectives:** Hepatitis E is an infection caused by the E virus (HEV) with the fecal-oral transmission. The spectrum of the disease varies from acute form to chronic evolution. There are few studies in the rural region of Bahia State. This study aimed to study the seroprevalence of hepatitis E in a city in a rural region in Brazil.

**Materials and Methods:** Held in May 2022 at family health clinics (PSFs) in the city of Serrinha-Bahia State, with 80,000 inhabitants and 184.6 km from Salvador, capital city. Participants who agreed to integrate into the study signed the Free and Informed Consent Term, collected blood samples and answered the questionnaire. The samples were stored at -20°C until the moment of use; those that needed to be retested for IgM were transported on dry ice and frozen at -80°C. IgG and IgM anti-HEV diagnostic kits (mikrogen and Diapro) approved by ANVISA of MS in Brazil were used. Medical-educational activities were carried out in the units on the prevention of viral hepatitis and health

**Results:** Of a sample of 300 volunteers, actually, 150 blood samples were analyzed, the prevalence of anti-HEV IgM and IgG was 2.66%, and anti-HEV IgG alone was 8.6%. Most were women, 75.3%, and the average age was 43 years (18 to 78 years). Median liver enzymes in HEV-positive patients were AST (27.5 IU/L), ALT (21 IU/L), and GGT (58.5 IU/L). Among the samples, 81% of the residences were in rural areas, 90.5% did not have a sewage system, 94.6% had running water, and 39.5% worked or worked with animal husbandry. Only 1.4% experienced flooding. The majority, 95.4%, consume pork and/or derivatives and 19.7% consume hunting meat.

**Conclusions:** A seroprevalence of 8.6% was found, higher than the result in a parallel study of our team in Salvador City (1.8%) and associated with a lack of basic sanitation, especially in rural areas.

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#### P-52 MALNUTRITION IN COMPENSATED AND DECOMPENSATED LIVER CIRRHOSIS

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**Introduction and Objectives:** Malnutrition (MN) is a common entity in patients with liver cirrhosis (LC) and has a negative impact on mortality. This study aimed to describe the prevalence of MN through subjective global assessment (SGA) and anthropometry in patients with LC and to analyze its relationship with the severity of the disease.

**Materials and Methods:** We included ambulatory and hospitalized patients >18 years old with LC. They were followed between