



Figure 1: Distribution of liver transplant patients and mortality during the observational period (Up to 1 year). We classified the risk groups by a regression tree. This method provides a predictive model of three profiles of risk: a body mass index (BMI) less than 19 and a BMI less than 24 with or without the requirement of dialysis.

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P- 105 DETECTION OF HEPATITIS D VIRUS IN PATIENTS WITH CHRONIC HEPATITIS B FROM SOUTH AMERICA.

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Introduction and Objectives: Worldwide, there is incomplete information about the epidemiology of hepatitis D virus (HDV), a hepatotropic satellite pathogen with an RNA genome, which requires the hepatitis B virus (HBV) as a collaborating agent for its transmission and spread. HDV genotypes have a defined geographical distribution. Very few studies have been carried out in South America. This study aimed to study the circulation of HDV in subjects with chronic HBV from South America.

Materials and Methods: We studied 38 samples obtained between 2019 and 2021 from individuals chronically infected with HBV by assessing the ESCALON network (a cross-sectional and prospective study addressing hepatobiliary disease in South America). Samples were from Argentina (n=12), Peru (n=11), Colombia (n=4), Ecuador (n=4), Chile (n=4), and Brazil (n=3). Total anti-HDV antibody detection was performed using the Liaison XL Murex anti-HDV kit (DiaSorin). Positive samples were subjected to viral RNA detection by RT-PCR, and genotyped by Sanger sequencing.

Results: Median age was 59 years old (IQR 48.5-67.3); 75% of the individuals were males and 25% were females. Three samples were positive for anti-HDV antibody detection (8%). Two of them, from Colombia and Chile, belonged to individuals with cirrhosis, while the third one, from Ecuador, originated from an individual with hepatocellular carcinoma (HCC). This sample could be amplified by RT-PCR, corresponding to a 44 years-old male. The sequencing showed HDV genotype 3.

Conclusions: The results show circulation of HDV in South America, with a prevalence close to that estimated by the WHO (5%). The detections were performed in patients with severe liver disease, likely secondary to the presence of the two viral agents (HDV+HBV). Although our cohort is small, its strength lies in the geographical amplitude of the samples (6 countries). The study remains active and is expected to substantially increase the sample size over the coming year.

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P- 107 EPIDEMIOLOGY, CLINICAL AND TISSUE CHARACTERISTICS OF A LARGE COHORT OF NAFLD/NASH FROM SOUTH AMERICA

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Introduction and Objectives: Some of the highest rates of non-alcoholic fatty liver disease (NAFLD) in the world are present in the South American continent. Indeed, recent reports suggest that NAFLD is becoming a common cause of hepatocellular carcinoma in the continent. Nonetheless, little is known about the epidemiology and tissue findings of NAFLD in the region. We provide an extensive assessment of the inter-relation of NAFLD with metabolic variables as well as medication intake and biopsy findings in South America.

Materials and Methods: A retrospective chart review of patients with NAFLD from 5 countries in Latin America (Argentina, Brazil, Peru, Ecuador and Colombia) via the South American Liver Research Network (SALRN). Diagnosis of NAFLD was obtained via imaging reports and biopsies. Logistic regression models were used to examine associations between clinical and tissue characteristics with individual patient features. Each center was responsible for its own ethics approval.

Results: 2722 patients from five different centers (and five different countries) were included in the analysis, with proportions being the following: Argentina 556 (20%), Brazil 596 (22%), Colombia 1490 (55%), Ecuador 50 (2%) and Peru 30 (1%). The median age was 53 years (IQR 21-41) and the median BMI was 29 kg/m² (IQR 26-36). 63% were female. Biopsy reports were available for 35% (n=947), with 25% (n=232) of those showing significant fibrosis, 27% (n=254) severe steatosis, and 65% (n=616) inflammation. Only 17% of subjects had diabetes mellitus, 34% dyslipidemia, and 31% Hypertension. The median ALT for the entire cohort was 38 IU (IQR 25-65) and AST 28 IU (IQR 21-41). Of 1407 subjects with medication information, 29% were on lipid-lowering agents, 12% on aspirin, 28% on metformin and 5% on vitamin E. Independent predictors of significant fibrosis (\geq F2) on biopsy were: Diabetes mellitus (OR =2.97, 95% CI, 2.12 – 4.15, $p < 0.0001$), hypertension (OR =1.59, 95% CI, 1.17 – 2.17, $p = 0.003$), and metformin (OR =2.71, 95% CI, 1.82 – 4.02, $p < 0.0001$). There was no statistically significant association between $F \geq 2$ fibrosis and obesity or overweight. Diabetes and Hypertension were both independently associated with severe steatosis (OR =1.93, $p = 0.0001$ and OR =2.13, $p < 0.0001$, respectively).

Conclusions: This study provides critical information defining the epidemiology of NAFLD in South America, showing important correlations between hypertension and diabetes mellitus with clinically significant biopsy findings.

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P- 108 POLYMORPHISMS OF HLA (LOCI DR 4*) IN HISPANICS AS RISK FACTOR FOR DE-NOVO AUTOIMMUNE HEPATITIS AFTER LIVER TRANSPLANTATION

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Introduction and Objectives: De-novo Autoimmune Hepatitis (De-novo AIH) after Liver Transplantation (LT) is an entity recently described and considered rare. Its importance relies on a severe clinical course, with graft loss in the short term, non-response to immunosuppressant therapies and requiring retransplantation even more than once. The Colombian population has a higher incidence of autoimmune liver diseases when compared to the literature, with a more aggressive clinical course and poorer response to classical immunosuppressive therapies requiring LT. This suggests a unique genetic component of the Colombian population that determines specific management and prognosis. The HLA (loci DR 3 * and DR 4 *) has been associated with De-novo AIH, especially in children, but no studies have been published in Hispanic Adults to date.

Materials and Methods: A retrospective observational study. The overall objective of this study was to determine the allelic frequencies of HLA (loci DR 3 * and DR 4 *) in donor livers of a Colombian population of patients with LT and its association with De-novo AIH.

Results: Out of 260 adult patients with LT at Cardioinfantil Foundation, eight were identified with De-novo AIH, all with graft loss and indication for liver retransplantation, 2 of them with graft loss for the second time in less than one year. HLA DR 4 was identified in all donors of patients who developed De-novo AIH.

Conclusions: The association between HLA DR-4 and De-novo AIH after LT establishes a precedent in the history of liver

transplantation not only in Colombia but the world and requires immediate attention.

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P- 109 NON-INVASIVE ASSESSMENT OF FIBROSIS REGRESSION IN VIROLOGICAL RESPONDERS SUSTAINED BY HEPATITIS C VIRUS

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Introduction and Objectives: Hepatitis C virus is the leading cause of end-stage liver disease worldwide. Assessing the severity of liver disease is necessary before the start of therapy since this will depend on the regimen and subsequent prognosis, so there are invasive and non-invasive measures documenting advanced liver fibrosis and cirrhosis are related to worse results; at the time of diagnosis, more than 50% have evidence of cirrhosis, so it is necessary to evaluate the follow-up of patients with advanced liver disease and document its regression non-invasively due to sustained virological response. This study aimed to determine with non-invasive methods the regression of fibrosis in sustained virological responders in the Infectious Disease Unit and to document which stage is predominant when presenting sustained virological response.

Materials and Methods: Observational, retrospective, longitudinal study, elastography was performed, FIB4 and APRI were calculated before and after the sustained virological response. The regression was analyzed with McNemar's Chi square to document differences before and after treatment.

Results: 53 patients were acquired, and of these, 51% were women; the three non-invasive methods were represented in tables before and after, being F2 in the three methods the main degree of fibrosis before treatment and when they had sustained virological response this was found to F0 and F1, $p < 0.001$ when comparing before and after treatment in the three non-invasive methods.

Conclusions: There is regression now of having sustained virological response in patients who presented advanced disease documented with non-invasive methods. The stages in order of frequency according to APRI after treatment are F0 with 72%, FIB 4 with 51% stage F0 and for elastography, it is F0 with 26% and F1 with 44%.

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P-110 BIOPSY IN FOCAL LIVER LESIONS: CORRELATION FROM CLINICAL TO HISTOPATHOLOGY

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Introduction and Objectives: Liver biopsy is an invasive technique through which we obtain a small sample of tissue for histopathological analysis under a microscope. This technique is