**children Child A. Platelets/spleen size predicted EV in children Child B and C.**

| | Group 1 (N=89) | Group 2 (N=79) | P |
|---|---|---|---|
| Platelet count ($10^3$/mcl) | 142.0 (99.5-207.5) | 95.0 (64.0-180.0) | 0.003 |
| Spleen size (cm) | 12.7 (11.0-14.8) | 13.7 (11.0-16.9) | 0.088 |
| Spleen size z score | 3.92 (2.25-6.13) | 5.94 (2.64-8.16) | 0.010 |
| Platelet count/spleen size | 1.06 (0.72-1.46) | 0.72 (0.41-1.29) | 0.008 |
| Platelet count/spleen size z score | 14.7 (9.7-21.2) | 9.3 (5.1-17.2) | 0.000 |
| Platelet count/EASS | 8.3 (5.3-11.0) | 5.5 (3.3-9.9) | 0.005 |
| Apri | 1.0 (0.5-2.3) | 2.3 (1.1-5.0) | 0.000 |
| Cpr | 117.9 (110.4-130.4) | 95.3 (77.7-109.8) | 0.000 |
| Risk score | -1.8 (3.4- -0.4) | 1.6 (-0.2-3.2) | 0.000 |
| King's variceal prediction score | 94.9 (84.6-106.4) | 64.7 (44.4-83.6) | 0.000 |
| Esofageal varices | 44 (49.4%) | 51 (64.6%) | 0.061 |

## P-119 GENETIC VARIABILITY OF HEPATITIS B VIRUS AMONG DIFFERENT PHASES OF CHRONIC INFECTION AND HIV COINFECTION IN BRAZIL

Livia Melo Villar[1], Bianca Leires Marques[1], Larissa Tropiano da Silva Andrade[1], Vanessa Alves Marques[1], Moyra Machado Portilho[1,2], Lia Laura Lewis-Ximenez[1], Barbara Vieira do Lago[1]

[1] *Fiocruz, Rio de Janeiro, Brazil*
[2] *Fiocruz Bahia, Salvador, Brazil*

**Introduction:** Molecular studies regarding hepatitis B virus (HBV) infection are essential as the disease severity depends on these specifications.

**Objectives:** This study aims to determine HBV genotypes and subgenotypes, nucleos(t)ide analogs (NA) resistance, and HBsAg escape mutations in HBV patients according to different phases of chronic hepatitis B (CHB) and HIV status.

**Methods:** A total of 93 HBsAg+ patients over 18 years of age were included. Four different phases of CHB have included: 10 immune tolerant phases (IT), 5 immune reactive HBeAg positive phase (IR), 46 low replicative (LR) state, 23 HBeAg-negative CHB (ENH), and also 9 HIV/ HBV coinfected individuals. Samples were submitted to PCR for detecting an overlapping *pol/ S* gene region and direct sequenced. Phylogenetic analyses were performed using Mega-X software, identification of vaccine escape and NA resistance was made using the Geno2Pheno HBV website.

**Results:** Mean age was 44.5± 13.3 years and most of HBV subjects were males (56.9%). Most of the individuals presented genotype A (75.3%) irrespective of group, subgenotype A1 (61 3%), followed by genotypes D (17.3%), F (6.4%), E (1.1%). Genotypes D and F were prevalent in LR group (75% and 66.6%, respectively) and genotype E was found only in IT group (1/1). It was not found NA resistance described to common antiviral treatment. However, high frequency of some specific mutations was found in all groups, such as, M129L (72.0%); W1 53RW (36 5%); V1 63I (64.5%); I253V (55.9%); V278IV (30.1%). Seven subjects (7.5%) presented HBsAg escape mutation of whom the majority had genotype A (85.7%) and belongs to LR group (57.1%); 1 had genotype D (14.3%), 2 were HIV/ HBV coinfected (28.6%) and 1 was ENH (14.3%).

**Conclusions:** It was found a high prevalence of genotype A1 irrespective of CHB phase or HIV coinfection and HBsAg escape mutations could impact antiviral treatment and diagnosis.

## P-120 NATIONAL SURVEY ON CURRENT PRACTICES TO PREVENT HBV REACTIVATION DURING IMMUNOSUPPRESSION

J.M. Araujo-Neto[1], M. Iasi[1], L.C. Nabuco[1], F.S.R.P. Pessoa[1], E. Vilela[1], R. Stucchi[1], L.Y. Sassaki[1], A.K.G. Melo[1], A.C.S. Jesus[1], J.F. Ramos[1], M.I. Braghiroli[1], G. Pilleggi[1], D.M. Langhi-Junior[1], A.K. Coutinho[1], M.L. Ferraz[1], P.L. Bitencourt[1], C.E. Brandão[1]

[1] *Instituto Brasileiro do Fígado - Sociedade Brasileira de Hepatologia*

**Introduction:** Reactivation of hepatitis B virus (HBVr) is a problem still neglected worldwide.

**Objective:** To assess knowledge of physicians regarding HBVr during immunosuppression including use of immunobiologics (IS/IB).

**Methods:** Between August and October 2020, a national survey regarding current practices in HBVr prevention was sent to members of the Brazilian Societies of Hepatology, Gastroenterology, Hematology, Rheumatology, Oncology and Transplantation using a web-based approach.

**Results:** 510 physicians answered the survey, mainly gastroenterologists (35%) and rheumatologists (31%). The majority had less than 20 years of clinical practice (62%). 91% reported to routinely request serology for HBV before IS/IB. To 90% of the interviewed doctors, in their clinical practice, serology is missing in less than 25% of their patients already using IS/IB. The most common serology panel requested (75%) is HBsAg, Anti-HBc and Anti-HBs. 76% recommend strategies to prevent HBVr for either HBsAg and/or anti-HBc-positive patients, however, 16% only prescribe to HBsAg-positive. 85% have an specialist on HBVr available for referring patients, but 30% start prevention strategies without the need for specialized evaluation. In this case, the preferred treatment options are entecavir (18%), tenofovir (17%) and lamivudine (6%). 88% reported good adherence of their patients to HBVr prevention strategy. Only 27% referred to maintain prevention strategy for at least 6 months after IS/IB interruption. Finally, 73% of the participants never experienced HBVr on their practice and 42% participated in educational activities about HBVr in the last 2 years.

**Conclusions:** Compared to previous literature, Brazilian physicians seems to have a better compliance to international guidelines toward HBVr prevention. With the exception of duration of HBVr prophylaxis, medical knowledge on this field can be regarded as above average.

## P-121 ASSESSMENT OF THE ANTERIOR AND POSTERIOR ATTENTIONAL NETWORKS IN PATIENTS WITH MINIMAL HEPATIC ENCEPHALOPATHY

Daniel Santana[1], Luis Pérez José[1], Fátima Higuera de la Tijera[1]

[1] *Hospital General de México, "Dr. Eduardo Liceaga"*

**Introduction:** In patients with minimal hepatic encephalopathy (MHE), the spectrum of cognitive functions impaired is related to motor slowness, although the attentional network could also be affected. The posterior and frontal attentional networks can be assessed with discrimination and interference tests, respectively.

**Objective:** Compare the response to the increase of attentional demands through the discrimination test in the presence of distractor stimuli.

**Methods:** Thirty-five cirrhotic (55±3.4 years old) patients and forty-seven controls (41±11.1 years old) performed a discrimination task consisting of two different tones and an interference task of three tones. Reaction times (RT) were recorded. MHE was detected with the number connecting test (NCT-B), age, and years of education corrected.

**Results:** MHE was detected in 12/35 (34%) of cirrhotic patients. Analysis of covariance ANCOVA (group as a factor, age, and education as covariables) was statistically significant for RT of the discrimination task; control vs cirrhosis (p=0.011) and control vs MHE (p<0.001). For the interference task in both control vs cirrhosis and control vs MHE (p<0.001), the RTs were not different between MHE and cirrhosis.

**Conclusions:** The attentional network anterior and posterior assessed with discrimination and interference attentional test is impaired in both cirrhotic and MHE patients compared to controls.

## P-122 LIVER TRANSIENT ELASTOGRAPHY (FIBROSCAN). FIRST REPORT OF EXPERIENCE IN ECUADOR

Jaysoom Abarca Ruiz[1], Mariela Villagomez Estrada[2], Wendy Calderón[1], Enrique Carrera[1]

[1] *Gastroenterology Service Hospital Eugenio Espejo, Hospital Metropolitano, Quito, Ecuador*
[2] *Universidad Centra del Ecuador, Quito, Ecuador*

**Introduction:** Chronic liver diseases and their complications are important health problems due to their high morbidity and mortality. In Ecuador, according to INEC during 2017, cirrhosis and other liver diseases represent the seventh leading cause of death. In public hospitals liver diseases represent a significant percentage of hospital admissions, generating a significant economic impact.

In 2017 year, a private health center acquired a liver transient elastography, being the first equipment available for Ecuadorians.

**Objectives:** Describe the experience obtained with FibroScan, during the years 2017-2018, in a private center in the city of Quito-Ecuador.

**Methods:** Retrospective descriptive study. All patients attended from January 2017 to December 2018 were included. The Fibroscan touch 503 Echosens MR brand elastography equipment was used. For the classification of Fibrosis (Kp) the Fibroscan table, specified by the manufacturer, was used.

**Results:** During the observational period, a total of 272 procedures were performed distributed in 173 male (50 - 59 years old), and 99 female (40- 49 years old). The most frequent indication was for fatty liver (36.76%), followed by altered liver tests (31.25%). Approximately, 40.1% of patients had a BMI between 25 and 29.9 which corresponds to grade I and II overweight. Stages F0-F1 in relation to Kpa were found in 171 patients, 62.9% of the series and stages F4 in 59 patients (21.7%). A total of 37.1% of patients with S3 measured by CAP were found; of which 29% belong to the overweight and obesity groups 1. In relation to age, the stage corresponding to F4 was found in 45 (20.1%) patients aged between 50 and 89 years.

**Conclusion:** Non-alcoholic and alcoholic fatty liver (36.75% of our cohort) constitutes one of the most prevalent pathologies in Ecuador as a cause of chronic liver disease.

- The highest percentage of patients, 62.9%, were in Stages F0-F1, which allows a timely therapeutic intervention to prevent their progression. 21.7% were found in stage F4 (cirrhosis).
- Elastography is a non-invasive, precise, safe, easy to perform, cost-effective technique, with immediate results to estimate liver fibrosis.

| IMC | 18,5-24,9 | % | IMC | 25,0-29,9 | % |
|---|---|---|---|---|---|
| F0-F1 | 43 | 61.43 | F0-F1 | 77 | 70.64 |
| F2 | 2 | 2.85 | F2 | 13 | 11.93 |
| F3 | 4 | 5.72 | F3 | 5 | 4.59 |
| F4 | 21 | 30 | F4 | 14 | 12.84 |
| IMC | 30,0-34,9 | % | IMC | 35,0-39,9 | % |
| F0-F1 | 40 | 58.82 | F0-F1 | 7 | 41.18 |
| F2 | 8 | 11.76 | F2 | 3 | 17.64 |
| F3 | 3 | 4.41 | F3 | 0 | 0 |
| F4 | 17 | 25 | F4 | 7 | 41.18 |
| IMC | >40,0 | % | | | |
| F0-F1 | 4 | 50 | | | |
| F2 | 3 | 37.5 | | | |
| F3 | 1 | 12.5 | | | |
| F4 | 0 | 0 | | | |

## P-123 PROFILE OF NONALCOHOLIC FATTY LIVER DISEASE (NAFLD) X TREATMENT: A NUTROLOGY'S VIEW

Suzana Tyrrasch de Almeida-PHD[1],
Georges Benedicto de Almeida Neto[2],
Ana Paula Tyrrasch de Almeida[3],
Felipe Gabino Macedo[4]

[1] *Adjunct Professor of Clinical Medicine-Hospital das Clínicas/EBSERH/UFPE/Recife/PE/Brazil*
[2] *Physician of Recife City Hall- Endocrinology / Nutrology -Recife/PE/Brazil*
[3] *Physician Recife City Hall - Medical Clinic- Recife/PE/ BRAZIL*
[4] *Nutritionist- Recife/PE/Brazil*

**Introduction:** Non-alcoholic fatty liver disease (NAFLD) is defined as a worldwide public health problem. NAFLD is a metabolic syndrome that involves: dyslipidemia, type 2 diabetes mellitus (DM2), obesity, cardiovascular diseases, cirrhosis, low levels of adiponectin and hepatocarcinoma whose rate of morbidity and mortality is quite high.

**Objective:** To evaluate the relationship between the degree of non-alcoholic fatty liver disease (NAFLD) in patients of both sexes, analyzing lifestyle and drugs associated with metabolic disorders that correct and influence the evolution of the disease.

**Methods:** A retrospective study was conducted in patients with NAFLD treated, following the following procedures: physical and laboratory (fasting glucose, LDL and HDL cholesterol, triglycerides, TGO, TGP, gamaGT, ferritin and insulin and Hydrox-vit-D) (Table 1), ultrasound of the liver and assessment of nutrology / nutrition. Safety and efficacy were assessed over a 180-day follow-up.

**Results:** 60 patients were included with variables shown in (table 1). In the ultrasound analysis he classified: mild (8), moderate (36) accentuated (16). Hepatic elastography (Fibroscan) was performed in 1/3 of the patients in a marked way, mostly showing fibrosis <2 on the Metavir scale and in two cases: fibrosis 4. The nutritional protocol with a protein-based diet: chicken, fish and eggs, fruits, roots, vegetables and whole grains, including probiotics in 30% associating orlistat-120 mg + omega-3-1000 (EPA + DHA) + silymarin-200mg + Metformin (glyphage-XR-500mg) in two daily doses; vit supplementation. A-Z and vit. D (2,000 to 10,000 wm) and physical exercise. In the period between 90 and 180 days, weight loss, reduction in hepatic and metabolic rates and changes in the grading of liver ultrasound analysis were observed.

**Conclusion:** The profile of NAFLD was determined by a non-invasive method: laboratory and ultrasound and the recommendation of a nutrology / nutrition protocol, associated with drugs that correct