P- 99 ASSOCIATION OF LIVER ABNORMALITIES WITH DISEASE SEVERITY IN COVID-19

Jhankarla Hinojosa, Caio Magrini, Perla Schulz, Andrea Vieira, Roberto da Silva Junior

Departament of Medicine, Santa Casa de São Paulo School of Medical Sciences, São Paulo, Brazil

Introduction and Objectives: Identifying independent risk factors for adverse outcomes in patients infected with severe acute respiratory syndrome coronavirus 2 can support prognostication, resource utilization, and treatment. The presenting symptoms of this virus are variable and the evolution and clinical significance of abnormal liver chemistries on outcomes in patients with coronavirus disease 2019 (COVID-19) is not well characterized. This study aimed to evaluate if aspartate aminotransferase (AST) and alanine aminotransferase (ALT) levels could predict disease severity in patients with COVID-19.

Materials and Methods: a retrospective, observational and cross-sectional study was carried out with data from the medical records of patients who had positive SARS-CoV2 nasal swabs, were over 18 years of age and were admitted consecutively and under free demand at a Brazilian academic hospital from April 1 to May 31, 2021. The characteristics of liver abnormalities and outcomes of patients with COVID-19 were compared.

Results: altogether, 222 patients were enrolled, three patients with cirrhosis and 82% with abnormal liver chemistries during hospitalization. Of these, 20% showed transaminases >5 times the upper limit of normal (ULN). The most prevalent liver abnormality was AST. The increase in transaminases was directly proportional to the higher rates of intensive care unit admission, longer hospital stays, higher rates of vasoactive drug use and greater pulmonary involvement in its severe forms. We found that elevations of transaminases >5 times the ULN, at any time during hospitalization were associated with increased mortality.

Conclusions: coronavirus 2 hepatitis may lead to poor outcomes in patients who are hospitalized for the disease. Therefore, monitoring liver chemistries, especially AST is necessary for hospitalized patients with COVID-19.

https://doi.org/10.1016/j.aohep.2023.100985

P- 101 TREATMENT OF PATIENTS INFECTED WITH HEPATITIS C VIRUS IN TWO REFERENCE CENTERS IN PARAGUAY.

José Mongelós, Marcos Girala, Mariam Garayo, Sara Melgarejo, Sergio Morinigo, Jesús Ortiz Villalba

Department of Gastroenterology and Digestive Endoscopy, National University of Asunción, San Lorenzo, Paraguay

Introduction and Objectives: Treatment with Direct-Acting Antivirals (DAA) has revolutionized the treatment of hepatitis C, with a high success rate. There is very poor information on the outcome of treatment in these patients in Paraguay. Gathering information in this regard would help develop health-related public policies related to the management of this infection in the country. The aim is to determine the proportion of patients with Hepatitis C who received treatment, of what type, and the percentage of patients with a sustained virologic response (SVR).

Materials and Methods: Observational, descriptive, cross-sectional, retrospective design. Patients from the Gastroenterology Department of the Clinicas Hospital were included from April 2011 to September 2021 and patients from a private referral center from April 2000 to September 2021.

Results: 8,504 medical records from the Clinicas Hospital and 8,137 from the private center were analyzed. Fifty-three patients diagnosed with HCV infection were identified. 55% (29) received an IFN-based regimen, 32% (17) received DAA-based treatments, and 19% (10) did not have access to treatment. Among the patients in the first group, 20 received PEG-INF+Rivabirin, with SVR in 65% of the cases, and 6 received non-pegylated IFN+Rivabirin, achieving SVR at 33%. In the DAA group, we found that 100% of patients achieved SVR. 41% of them received Sofosbuvir+Ledipasvir, 24% Sofosbuvir+Daclatasvir and 18% Sofosbuvir+Velpatasvir.

Conclusions: This study showed 46 patients treated in our country. All those treated with DAAs (17) achieved SVR. Due to their great effectiveness, we must direct public health efforts to ensure that patients can have free access to DAAs.

https://doi.org/10.1016/j.aohep.2023.100986

P- 102 CLINICAL CHARACTERISTICS OF LIVER CIRRHOSIS SECONDARY TO METABOLIC SYNDROME AND COMPARISON WITH ETHYL CIRRHOSIS

Laura Martínez¹, Elias Morán², Marcos Girala³

- ¹ Medical Clinic Department, Clinicas Hospital, San Lorenzo, Paraguay
- ² Department of Gastroenterology and Digestive Endoscopy, National University of Asunción, San Lorenzo, Paraguay
- ³ Hepatology Unit, Clinicas Hospital, San Lorenzo, Paraguay

Introduction and Objectives: Liver cirrhosis secondary to metabolic syndrome has become one of the most prevalent causes of cirrhosis and is assumed to have a prognosis similar to that of cirrhosis of other etiologies. This study aimed to describe the clinical characteristics of liver cirrhosis secondary to metabolic syndrome (MAFLD) at the Clinicas Hospital and compare it with ethyl cirrhosis (ET).

Materials and Methods: Analytical, retrospective, cross-sectional, non-probabilistic observational study of consecutive cases. The medical records of the Gastroenterology Department of the Clinicas Hospital for the years 2018 and 2019 were reviewed and patients diagnosed with ET cirrhosis and MAFLD were recruited. For data processing, the computer programs Excel 2010, Word 2010 and the statistical programs MedCalc version 20.110, Epi dat 3.1 and IBM SPSS were used.

Results: 900 medical records were analyzed, 100 patients with liver cirrhosis were identified, 77 of alcoholic etiology and 23 secondary to metabolic syndrome.

Conclusions: In the present study, liver cirrhosis secondary to MAFLD presents complications typical of cirrhosis, the incidence of hepatocarcinoma, functional status and average survival similar to those of alcoholic cirrhosis. However, elements of the metabolic syndrome are much more so in cirrhotic MAFLD than in cirrhotic ET.

Comparing both groups, the following results were obtained:

		Cirrhosis ET	Cirrhosis MAFLD	p
Average age (years)		55,87	58,91	0,750
Sex (%)	M	84,4	56,5	0,005
	F	15,6	43,5	0,005
Source (%)	Urban	61	65,2	0,717
	Rural	37,7	34,8	0,802
Average MELD (points)		14,99	12,83	0,143
Child-Pugh (%)	Α	24,7	39,1	0,175
	В	40,3	52,2	0,311
	C	32,5	8,7	0,024
Arterial hypertension (%)		19,5	87	0,000
Obesity (%)		2,6	47,8	0,000
Type 2 diabetes (%)		18,2	82,6	0,000
Portal hypertension (%)		90,9	95,7	0,462
Hepatocellular carcinoma (%)		3,9	8,7	0,354
Survival (months)		19,7	23,9	0,449

https://doi.org/10.1016/j.aohep.2023.100987

P- 103 PREVALENCE OF SARCOPENIA IN CIRRHOTIC PATIENTS IN AN OUTPATIENT SERVICE IN BRAZIL

Carolina Pretti Tumang de Andrade¹, Lara Ferrari Dalcumune¹, Nubia Mesquita Fiorese¹, Livia Zardo Trindade^{1,2}, Felipe Bertollo Ferreira^{1,2}, Mariana Poltronieri Pacheco^{1,2}

Introduction and Objectives: Sarcopenia is defined by progressive and generalized loss of muscle mass and strength, a phenomenon observed in many patients affected by chronic illnesses. It reflects proteic-energetic malnutrition due to a metabolic imbalance, and it is associated with worse prognostics and higher mortality rates in post-hepatic transplant patients. This study aimed to assess the epidemiological distribution of sarcopenia and its association with liver function and complications of hepatic disease in cirrhotic patients in an outpatient service in Santa Casa de Misericórdia de Vitória Hospital -ES.

Materials and Methods: Transversal, epidemiologic and unicentric study. We applied a questionnaire and measured hand grip strength using a dynamometer, taking three measures of hand grip maximum strength for 3 seconds each.

Results: The study included 64 cirrhotic patients, with a mean age of 58 years and alcohol as the most present etiology. Sarcopenia was defined as present according to two different cut-off values: using cut-off value 1, sarcopenia was identified in 33 patients (51,6%); by cut-off value 2, 23 (35,9%) were sarcopenic. The study showed a significant association between the female sex and sarcopenia in both cut-off values. Furthermore, there was a relevant increase in sarcopenia by cut-off value 2 in patients with Model for End-Stage Liver Disease (MELD) scores greater or equal to 15. There was no association of sarcopenia with the event of ascites and/or hepatic encephalopathy.

Conclusions: Within the data obtained, there was a variation of sarcopenia of 35-52% regarding hand grip values, which was associated with elevated MELD scores, demonstrating a possible connection between sarcopenia and worse outcomes. Therefore, the presence of sarcopenia in cirrhotic patients might be related to prognostic factors and should be assessed in the clinical management of these patients.

https://doi.org/10.1016/j.aohep.2023.100988

P- 104 EXPERIENCE AND CARDIOVASCULAR OUTCOMES IN POST-LIVER TRANSPLANT PATIENTS AT A REFERENCE TRANSPLANT CENTER IN COLOMBIA

Carlos Martinez¹, Catalina Gutierrez², Daniel Rojas³, Sandra Saummet⁴, Camila Galindo⁵, Rafael Conde⁶, Adriana Varon⁷

¹ Internal Medicine Resident, University of Rosario, Gastroenterology Service, La Cardiovascular Center, Bogotá, Colombia

² Internal Medicine Resident, University of Rosario, Gastroenterology Service, La Cardio, Bogota, Colombia ³ Internist, University of Rosario, Fellow in Gastroenterology, University of Rosario, Gastroenterology Service, La Cardio. Bogotá, Colombia ⁴ Undergraduate Student, University of Rosario, Gastroenterology Service, La Cardio Bogota, Colombia ⁵ Undergraduate Student, University of Rosario,

Gastroenterology Service, La Cardio Bogota, Colombia.

⁶ Pneumologist, Colombian Pneumological Foundation, Pneumology and Pulmonary Hypertension Service.
Bogotá, Colombia

⁷ Gastroenterologist, University of Rosario, Gastroenterology and Liver Transplant Service, La Cardiovascular Hospital, Gastroenterology and Pulmonary Hypertension Service. Bogota, Colombia

Introduction and Objectives: Liver transplant patients require a vast and complex evaluation prior to transplant surgery. Hemodynamic evaluation by Doppler echocardiography is important in the identification of systolic/diastolic alterations as a predictor of post-liver transplant outcomes, from cardiovascular alterations to graft dysfunction and mortality. This study aimed to describe the relationship between the hemodynamic variables evaluated by Doppler echocardiography and post-transplant liver outcomes in patients diagnosed with cirrhosis at LaCardio hospital. We describe the demographic variables of our cohort and outcomes such as mortality, acute kidney injury, need for dialysis and hospital admission for acute heart failure in the post-transplant period up to one year of follow-up.

Materials and Methods: Retrospective cohort study. Patient with liver transplant at LaCardio hospital, in Bogotá, Colombia, between January 2005 and July 2021. Analysis of sociodemographic variables, comorbidities, echocardiography and intraoperative variables, with primary outcomes such as early graft dysfunction, acute kidney injury and intraoperative mortality. A classification and regression tree (CART) was performed.

Results: 397 patients were analyzed, with 54.4% men. The median of age was 56 years and the most common etiology of cirrhosis was alcoholic. The most common comorbidities were hypertension (54%) and type 2 diabetes mellitus (24%). In 71% of patients, there was some degree of diastolic dysfunction and left ventricular hypertrophy (30.9%). The presence of graft dysfunction was present in up to 8% of patients and was associated with acute kidney injury (AKI) in 21%, requirement of multiple transfusions during surgery and renal replacement therapy with a mortality of 15% during study follow-up. In the CART model for mortality and graft dysfunction outcomes, it was related to the presence of BMI<19 or the combination of BMI between 19 and <24 with dialysis.

Conclusions: Echocardiographic variables, the presence of sarcopenia and the presence of AKI or requirement of renal replacement therapy were related to mortality and graft dysfunction outcomes.

¹ School of Sciences of Santa Casa de Misericórdia de Vitória, Vitória, Brazil

² Gastroenterology and Hepatology Department, Santa Casa de Misericórdia de Vitória Hospital, Vitória, Brazil