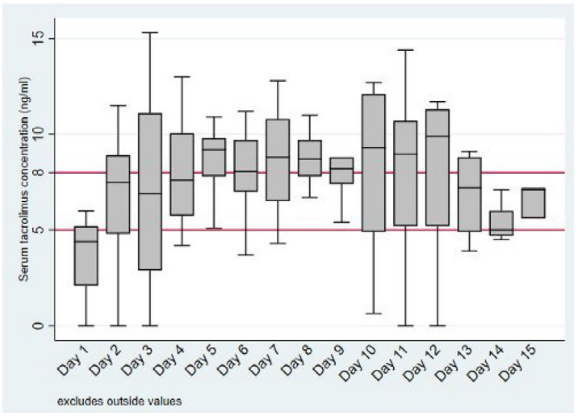

Figure 1. Boxplot of serum dose of tacrolimus every day

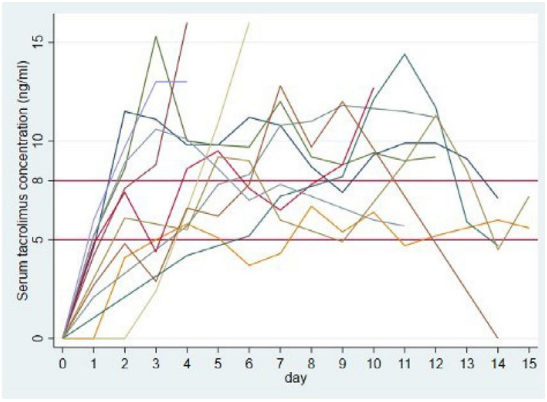

Figure 2. Line of serum concentration in time for every patient in the case series.

https://doi.org/10.1016/j.aohep.2024.101731

P-118 METABOLIC DYSFUNCTION-ASSOCIATED STEATOTIC LIVER DISEASE: INDICATION FOR LIVER TRANSPLANTATION AND OCCURRENCE IN THE POSTOPERATIVE PERIOD

Felipe Ramos Caprini[1],
Guilherme Massote Fontanini[2],
Juarez Roberto de Oliveira Vasconcelos[2],
Fernanda Fernandes Souza[3],
Ajith Kumar Sankarankutty[4],
Marcia Guimarães Villanova[2],
Roberta Chaves Araújo[3]

[1] *Hospital das Clínicas of Ribeirão Preto - University of São Paulo, Ribeirão Preto, Brazil*
[2] *Gastroenterology Division, Hospital das Clínicas of Ribeirão Preto - University of São Paulo, Ribeirão Preto, Brazil*
[3] *Professor of the Division of Gastroenterology, Department of Clinical Medicine at Faculty of Medicine of Ribeirão Preto - University of São Paulo, Ribeirão Preto, Brazil*
[4] *Division of Digestive Surgery, Department of Surgery and Anatomy at Faculty of Medicine of Ribeirão Preto - University of São Paulo, Ribeirão Preto, Brazil*

Conflict of interest: No

Introduction and Objectives: Metabolic dysfunction-associated steatotic liver disease (MASLD) is one of the most important causes of liver disease worldwide, and it is currently the main indication for liver transplantation.

This study aims to evaluate (1) clinical-epidemiological profile of patients listed for liver transplant due to MASLD-related cirrhosis and mortality on the waiting list; (2) occurrence of allograft steatosis and new post-transplant comorbidities; (3) survival of patients with and without MASLD in the postoperative period.

Patients / Materials and Methods: This retrospective study is based on a review of medical records of patients treated at the Liver Transplant outpatient clinic of the Hospital das Clínicas of the Faculty of Medicine of Ribeirão Preto - University of São Paulo, from 2005 to 2015.

Results and Discussion: Of all patients listed for liver transplant (610), 10% had MASLD-related cirrhosis. Of these, 47.5% were female, with an average age of 56.3 years. These patients had higher MELD values (P = 0.01), higher rates of metabolic syndrome (P<0.05), and waiting list mortality of 42.6%. About transplant patients (264), 58 developed hepatic steatosis post-transplant, 82.8% of these with new steatosis and 17.2% with MASLD recurrence. The development of new comorbidities, such as diabetes and systemic arterial hypertension, was present in 26.2% and 22.5% of transplant recipients. Obesity and hypertension were the variables associated with a greater risk of allograft steatosis. The average survival of patients undergoing surgery was 8.7 years. Individuals transplanted for MASLD had significantly lower survival than those with other causes of cirrhosis (P=0.05).

Conclusions: As MASLD is a highly prevalent disease, with different local realities, studies like this can serve as a basis for understanding the local reality and provide important information for developing public health programs.

https://doi.org/10.1016/j.aohep.2024.101732

P-119 POST-TRANSPLANT OVERALL AND GRAFT SURVIVAL AFTER LIVER TRANSPLANTATION FOR AUTOIMMUNE HEPATITIS

Ludmila Guedes Resende[1],
Francisco Guilherme Penna Cancela[1],
Fernanda Maria Osório Farage[1], Luciana Faria Costa[1],
Daniel Antônio Terra Albuquerque[1],
Artur Miranda M C[1], Guilherme Grossi Cancado[1],
Cláudia Couto Alves[1]

[1] *UNIVERSIDADE FEDERAL DE MINAS GERAIS, Belo Horizonte, Brasil*

Conflict of interest: No

Introduction and Objectives: Autoimmune hepatitis (AIH) represents the cause in 5-6% of the total amount of liver transplant in Brazilian centers. Factors that impact post-transplant outcomes are not well known. Data from the European registry show an overall survival of 79,4% post AIH liver transplant whereas Latin American numbers are scarce. The aim of this study is to evaluate long-term patient and graft survival after liver transplant due to AIH.

Patients / Materials and Methods: This is a retrospective and observational study that included 85 patients with AIH who received liver transplant at a reference center in Brazil, from 1996 to 2023. Demographic data was collected, and survival curves were performed using the Kaplan-Meier method.

Results and Discussion: Most of the cohort was composed of white (52,9%) females (71,8%). The median age at transplant timepoint was 27 years, ranging from 11 to 73 years. After LT 15,5% experienced graft lost, with the need of a second or third liver transplant. During the follow-up 32,9% of the patients died, with a mean survival time of 17.5 years (±1.4). The overall survival in 5 years was approximately 80%. There was no difference in survival between males and females. Conversely, patients who were submitted to more than one liver transplant had a poorer overall survival. (Fig.1).

Conclusions: Preliminary results show a good overall post-transplant survival for AIH, which is in compass with international reports. The necessity of retransplant conveys a worse prognosis. Other features that might impact overall and graft survival are to be further evaluated in this cohort.

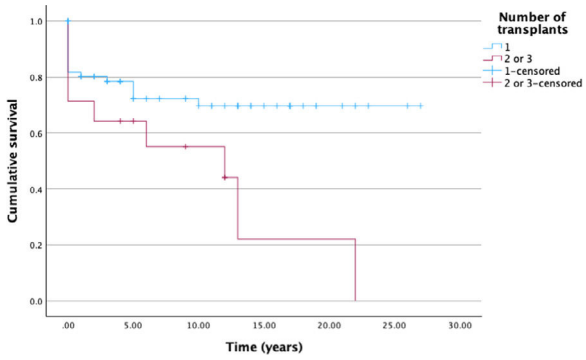

Figure 1 – Overall survival after liver transplantation from autoimmune hepatitis regarding the number of transplants

https://doi.org/10.1016/j.aohep.2024.101733

P-120 POLYMORPHISMS OF HLA (LOCI DR 4*) IN HISPANICS AS RISK FACTOR FOR DE-NOVO AUTOIMMUNE HEPATITIS AFTER LIVER TRANSPLANTATION

Adriana Varon Puerta[1], Luisa Fernanda Santos Cuervo[2], Oscar Alfredo Beltran Galvis[1], Martin Alonso Garzon Olarte[1], Cristina Torres[1], Jairo Rivera[1], Gilberto Andres Mejia[1]

[1] *La Cardio, Bogota, Colombia*
[2] *Universidad Nacional, Bogota, Colombia*

Conflict of interest: No

Introduction and Objectives: De-novo Autoimmune Hepatitis (De-novo AIH) after Liver Transplantation (LT) is considered rare. Its importance relies in a severe clinical course, with graft loss, non-response to immunosuppressants and need for retransplantation. The HLA (loci DR 3 and DR 4) has been associated with De-novo AIH especially in children in India.

The objective was to determine the allelic frequencies of HLA (loci DR 3 * and DR 4 *) in donor livers of an adult population of patients with LT and its association with De-novo AIH.

Patients / Materials and Methods: Retrospective observational study of cases and controls. 260 adult LT recipients were included. Cases were defined as histological confirmation of AIH De-novo after LT, controls were LT recipients free of the disease.

The proportion of exposed cases was compared with the corresponding proportion in the control group.

Results and Discussion: It is found that the frequency expressed as a percentage of individuals with the characteristic (HLA DR4 and De-novo AIH) is higher in the group of cases than in the control group, so it can be assumed a statistically significant association between the presence of HLA DR 4 in the donor and development of AIH De-novo after LT.

8 cases were confirmed. All presented alterations of liver function tests with necroinflammatory pattern during the first 3 months after transplantation despite levels of immunosuppression within therapeutic ranges and all possible causes of alteration of the hepatic profile were ruled out. Despite appropriate management all of them developed cirrhosis and indication of retransplantation.

Conclusions: AIH De-novo after LT is a real challenge for LT programs. Recent evidence demonstrating this type of genomic association with post-transplant diseases arouses the need for new management in line with Future, Precision or Personalized Medicine, where molecular biology and genetics play a crucial role in individualized therapies reducing costs avoiding unnecessary expenses to the health system.

https://doi.org/10.1016/j.aohep.2024.101734

P-121 SEPTIC SHOCK IN LIVER CIRRHOSIS: A COHORT STUDY OF A UNIVERSITY HOSPITAL IN CHILE

Carlos Padilla[1], Eduardo Villa[2], Daniela Simian[1], Juan Nicolás Medel[3], Victoria Estrada[4], Sofía Ruiz-Tagle[4], Juan Grant[4], María Paz Piñeiro[3], Álvaro Urzúa[1], Juan Pablo Roblero[1], Jaime Poniachik[1]

[1] *Sección de Gastroenterología, Departamento de Medicina Interna, Hospital Clínico Universidad de Chile, Santiago, Chile*
[2] *Medicina Interna, Hospital Clínico Universidad de Chile, Facultad de Medicina Universidad de Chile, Santiago, Chile*
[3] *Unidad de Paciente Crítico, Hospital Clínico Universidad de Chile, Santiago, Chile*
[4] *Facultad de Medicina, Universidad de Chile, Santiago, Chile*

Conflict of interest: No

Introduction and Objectives: Patients with cirrhosis and septic shock face a high mortality rate, reaching up to 40%. There is limited literature from Latin America on this condition and associated mortality variables. The aim was to describe mortality in patients with liver cirrhosis and septic shock and analyze the associated variables.

Patients / Materials and Methods: A retrospective, observational, analytical study was conducted on patients with liver cirrhosis, who were diagnosed with septic shock, according to Sepsis-3 criteria, during their hospitalization in Hospital Clínico Universidad de Chile, between 2017 and 2023. A confidence level was set at 95% with a statistical significance of $p = 0.05$.

Results and Discussion: A total of 68 patients with septic shock were included, with a mean age of 61 years; the majority were male (57%). The primary etiologies of cirrhosis were alcohol-related (31%) and metabolic-associated (27%). Most patients had a Child-Pugh score of B or C (95%). The 28-day mortality rate was 38%, and the one-year mortality rate was 54%. These patients experienced 74 episodes of septic shock. Of these, 61% were associated with healthcare-related infections, and in 47% a Gram-negative microorganism was identified. Significant variables associated with 28-day mortality included a history of hepatic encephalopathy, low platelet count at admission, elevated total bilirubin, and higher severity scores (SOFA, Meld-Na, CLIF-SOFA). One-year survival was significantly higher among patients who received a liver transplant (HR 0.11, 95% CI 0.01 – 0.86, $p = 0.036$) (Figure 1).