

¹¹ Medicina Interna, Hospital III Daniel Alcides Carrión, MINSA, Callao, Perú

¹² Gastroenterología, Hospital Metropolitano, EsSalud, Huanuco, Perú

¹³ Gastroenterología, Hospital Regional Docente de Cajamarca, Cajamarca, Perú

¹⁴ Gastroenterología, Hospital Nacional Ramiro Priale, Junin, Perú

¹⁵ Unidad de Hígado, Hospital Nacional Carlos Seguin, EsSalud, Arequipa, Perú

¹⁶ Gastroenterología, Hospital Belen, MINSA, Trujillo, Perú

Introduction and Objectives: Acute liver failure (ALF) is a severe clinical entity that requires a rapid diagnosis and for its proper management requires adequate intensive care support and the possibility of liver transplantation. This study aimed to show clinical epidemiological characteristics of ALF and the problematics of its management in Peru.

Materials and Methods: Google forms electronic survey answered (February-March 2023) by specialists who work in hospitals that care for patients with ALF throughout Peru with the sponsorship of 3 Peruvian scientific societies: intensive care (SOPEMI), Transplant (APTOT) and Hepatology (APEH).

Results: Representatives of 33 public and private hospital centers from the entire health services system responded the survey: Adults: 27/33 (81.8%) and Pediatrics: 6/33 (18.2%). ALF criteria diagnosis: severe acute liver injury with encephalopathy and impaired synthetic function (INR >=1.5) in a patient with preexisting liver disease and with an illness < 26 weeks duration. Geographical regions: Lima (12 million inhabitants: 66.7%) and 7 other regions of Peru: Arequipa, La Libertad, Junin, Tacna, Cajamarca, Huanuco & Puno (9 million inhabitants: 33.3%). Specialties: ICU: 36.4%, GI/hepatology: 30.3%, emergency: 15.2%, Pediatric CU: 9.1%. Male/female ratio 2-3/1: 57.6%. ICU stay: <1 week: 12.1%, <4 weeks: 57.6%, 4-8 weeks: 21.2%, > 8 weeks: 10.1%. ALF Diagnostic Criteria severity: MELD: 54.5%. Kings: 24.2%. Clichy: 3%. Possibility of being transferred to a transplant center: 51.5%. ALF Mortality: Multiorgan failure: 90.9%. ICU with multi-organ support: 57.6%.

Conclusions: ALF in Peru is a serious entity that especially affects the adult population, with high mortality, limited access and limited possibility of liver transplantation. It is necessary to have adequate resources from the government and scientific societies (SOPEMI, APTOT and APEH) to adequately attend this entity which requires support from human resources and adequate care from multidisciplinary health team.

P- 56 TUBERCULOSIS IN LIVER TRANSPLANT RECIPIENTS: EXPERIENCE OF A SINGLE CENTER

Cárdenas Ramírez Bertha¹, Padilla-Machaca P. Martin^{1,2}, Cerrón Cabezas Carmen¹

¹ Department of Transplant, Guillermo Almenara Hospital - EsSalud, Lima, Perú

² University San Marcos; Lima Perú

Introduction and Objectives: In Peru the tuberculosis (TB) is an endemic infectious disease. This disease is a serious opportunistic infection in transplant recipients (LTRs) and has 20 to 74-fold increase in a chance of developing compared to the general population. The prevalence of TB in (LTRs) is variable between regions. This study aims to describe the rate, clinics characteristics and mortality of TB in LTRs from a high-prevalence area.

Materials and Methods: We conducted a retrospective review of liver transplant recipients with tuberculosis diagnoses at Guillermo Almenara Hospital between Mach 2001 and March 2022.

Results: A total of 294 patients underwent LT during this period. 7 (2.3 %) adult patients were diagnosed with active TB. Mean age was 49 (32- 64) years; 5 (70 %) were males. Time interval from LT to TB diagnosis was 57 months (2-136) and 42 % had early tuberculosis (< 12 m). Three patients had disseminated TB and Four pulmonary involvement. 72 % received individualized treatment to avoid hepatotoxicity related to treatment, 28.5% had DILI with standard treatment. We found 28.5 % mortality no related to TB infections.

Conclusions: We observed a low rate of TB in LTRs (2.3%) from a high prevalence region. Most of our patients received individualized treatment.

<https://doi.org/10.1016/j.aohep.2023.101243>

P-57 CHARACTERIZATION OF HEPATOCELLULAR CARCINOMA AND ITS RELATIONSHIP WITH ALPHA-FETOPROTEIN LEVELS

Mayra Fernanda Beltran, Wilson Enrique Carrera, Jonathan David Alvarado, Jaysoom Willeem Abarca, Fabian Agustin Tulcanazo, David Napoleon Armas, Wendy Calderon, John Lata, Cecilia Trujillo, Andrea Paola Moreno, Ligia Gabriela Velalcazar, Darwin Paul Quevedo, Evelyn Maritza Quishpe, Maria Jose Suarez

Hospital Eugenio Espejo, Hospital Eugenio Espejo, Quito, Ecuador

Introduction and Objectives: Hepatocellular carcinoma (HCC) is the most common cancer of the liver, with differences in its incidence due to variance in risk factors and geographic locations. In Ecuador the incidence is 3.3/100000 with a mortality of 6.45/100000. Alpha-fetoprotein (AFP) is a biomarker used as a tumor marker for diagnosis, monitoring therapy and surveillance in HCC. This study aims to know the clinical and demographic characteristics of HCC and its relationship with AFP levels.

Materials and Methods: An observational descriptive analyze was used between 2018 and 2023, with a total of 65 patients with HCC, using percentages and frequency for qualitative data and central variance analyses for quantitative data.

Results: from 65 patients, 35 (54%) were men and 30 (46%) women. The mean age of diagnostic was 67.7 years old. 46(71%)

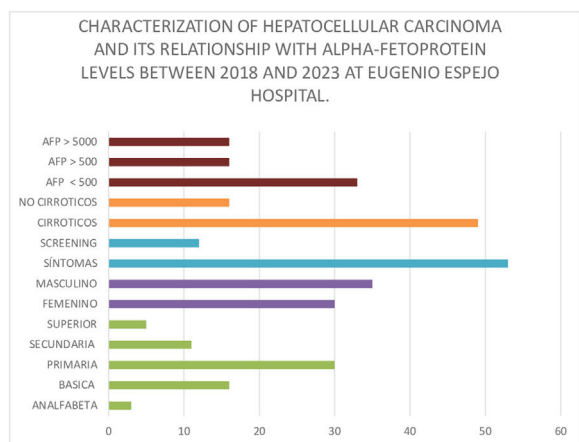
Table. Etiology, age, Cases/y, Classification, ICU admission time and evolution in ALF

Etiology	No	%	Age group	No	%	ALF Cases /y	No	%
Unknown	20	60.6	> 60 y	4	12.1	> 10	4	12.1
HAV	5	15.2	35-60 y	16	48.5	5-10	8	24.2
HILI	4	12.1	18-34 y	7	21.1	3-5	10	30.3
DILI	4	12.1	< 18 y	6	18.3	< 3	10	36.4
TOTAL	33	100	TOTAL	33	100	TOTAL	33	100
ALF Classification	No	%	ICU admission time (days)	No	%	ALF Evolution	No	%
Hiperacute	6	18.2	< 7 d	21	63.6	Spontaneous recovery	8	24.3
Acute	19	84.8	7-14 d	5	15.2	Death	19	63.6
Subacute	8	24.2	> 14 d	7	78.8	Liver Tx	4	12.1
TOTAL	33	100	TOTAL	33	100	TOTAL	33	100

<https://doi.org/10.1016/j.aohep.2023.101242>

people was found to have a low level of education and only 5(8%) had competent education. 53(82%) of patients had some clinical finding at the time of diagnostic while 12 (18%) did not and were diagnostic on surveillance. Cirrhosis was found to be the most common risk factor with 49(75%) presenting at the diagnostic compared with only 16 (25%) that were cirrhosis free. Levels of AFP at the diagnostic were less than 500 UI/mL in 33 (51%) patients over 500 UI/mL in 16 (25%) patients and over 5000 UI/mL in 16 patients. We could notice that higher values were found in cirrhotic patients.

Conclusions: Lower educational level, clinical findings and cirrhosis were associated with higher incidence of HCC. We could not find any relation between gender and HCC. Quantitative elevation of AFP is higher in cirrhotic patients than in non-cirrhotic patients. Our series concludes that the surveillance of HCC in cirrhotic patients is with ultrasound and AFP levels.



<https://doi.org/10.1016/j.aohep.2023.101244>

P- 58 CLINICAL OUTCOMES OF PATIENTS WITH GRAFT REJECTION FOLLOWING TRANSPLANTATION FOR AUTOIMMUNE LIVER DISEASE AT A LIVER TRANSPLANT CENTER IN COLOMBIA

Ximena Morales, Cristina Torres, Carolina Salinas, Martín Garzón, Geovanny Hernández, Oscar Beltrán, Gilberto Mejía, Andrés Murcia, Jairo Rivera, Angie Gelves, Felipe Méndez, Adriana Varón

Hepatología, Fundación Cardioinfantil, Bogotá, Colombia

Introduction and Objectives: Liver transplantation is the best treatment option for patients with cirrhosis and advanced autoimmune liver disease. Approximately 15-25% of transplanted patients experience acute graft rejection with standard immunosuppression regimens, and, less frequently, chronic rejection. There is limited evidence in Colombia regarding the incidence of these events and their impact on graft and patient survival. This study aims to characterize the rejection rates in patients transplanted for autoimmune liver disease at a Colombian liver transplant center.

Materials and Methods: Descriptive retrospective longitudinal study of a cohort of patients with autoimmune liver disease who underwent liver transplantation from November 2005 to December 2022.

Results: A total of 163 patients were transplanted for autoimmune hepatitis (AIH), primary biliary cholangitis (PBC), primary sclerosing cholangitis (PSC), and overlap syndromes. The rejection rate in

this population within the first year was 17.8% (n=29), between the first and fifth year was 22% (n=36), and between the fifth and tenth year was 6.3% (n=10). Acute rejections accounted for 90.7% of the cases. Approximately 80% of the patients were managed with calcineurin inhibitors plus mycophenolate, with or without corticosteroids, and 92.7% had immunosuppression levels within target range. The overall mortality rate was 14.6% (n=24): 7.36%(n=12) in AIH, 3.06% (n=5) in PBC, 3.6% (n=6) in overlap syndromes, and 0.6% (n=1) in PSC.

Conclusions: In this population, the acute rejection rates at one year, five years, and ten years after liver transplant were similar to those reported in the literature. However, patients transplanted for autoimmune liver disease have a higher rejection rate than other cirrhosis etiologies. These findings should prompt the evaluation of adjustments in immunosuppression protocols and determine other factors associated with rejection, such as the relationship between histocompatibility and rejection risk.

<https://doi.org/10.1016/j.aohep.2023.101245>

P- 59 ROLE OF MARESINA-1 ON THE KIDNEY AND LIVER MORPHOLOGY ON A MURINE MODEL OF TYPE I DIABETES MELLITUS INDUCED WITH STREPTOZOTOCIN

Pamela Carolina Morales¹, Jessica Pamela Zúñiga², Ramón Norambuena², Daniel González²

¹ Basical Biomedical Science Department, Department of Health Sciences, University of Talca, Talca, Chile

² Department of Natural Resources and Veterinary Medicine, School of Veterinary Medicine. Santo Tomas University, Talca, Chile

Introduction and Objectives: Diabetes mellitus (DM) is a chronic metabolic disease characterized by elevated blood glucose levels. DM1 manifests itself through hyperglycemia, the main factor inducing numerous life-threatening complications and comorbidities. DM has high morbidity and mortality associated with cardiovascular diseases, nephropathy and dyslipidemias, which are correlated with the deterioration of liver function. Maresin-1 (MaR1), a specialized pro-resolving lipid mediators has recently been described. MaR1 has a positive role in various inflammation-related pathologies particularly, it has favorable effect on chronic liver disease. This study aims to evaluate the effect of MaR1 administration on liver and kidney tissues in a murine model of DM1. Our hypothesis is that treatment produces an improvement in liver and kidney morphology.

Materials and Methods: male C57BL/6 mice where induced DM1 by Streptozotocin injection (50mg/Kg) and MaR1 (4ng/g) diary for 4 weeks. Liver and Kidneys were processed for H&E and Masson's Trichrome stain and morphological analyzed. An immunohistochemical study was also carried out with the use of antibodies to fibronectin and -SMA. The data was evaluated by Image J and Prism 9 software's.

Results: Both in liver and kidney, the MaR1 animal group recovers the cito-architecture and decreased the score of fibrosis in comparison with DM group, resembling the control group. In liver tissue a decrease of lipids deposit was observed in the MaR1, concomitant with the architecture improvement.

Conclusions: Mar1 at 4 ng/g generates a positive response in the liver and kidney morphology, depleting the tissue damage observed in a DM1 murine model. Deeper analysis should carry on for to enlarge this results and assay Mar1 as a potential therapeutic activity against one of the most prevalent diseases in the world, the DM.

<https://doi.org/10.1016/j.aohep.2023.101246>