Table 1. Baseline characteristics of patients with ACLF

Characteristics	No. patients	Percentage
Average age		
56 years		
Gender		
Female	95	51%
Male	91	49%
Etiology	No. patients	Percentage
Bile duct atresia	1	1%
CBP	13	7%
CBP/HAI	8	4%
CEP	5	3%
Portal cholangiopathy	1	1%
Alpha 1 antitrypsin deficiency	1	1%
NAFLD	54	29%
Wilson's disease	1	1%
Ethylism	42	23%
HAI	10	5%
Not determined	20	11%
HBV	4	2%
HCV	25	13%
HCV/CBP	1	1%
CLIF C ACLF		
71-80	4	2%
61-70	41	22%
51-60	99	53%
41-50	38	20%
31-40	4	2%
MELD		
51-55	2	1%
46-50	10	5%
41-45	20	11%
36-40	39	21%
31-35	50	27%
26-30	32	17%
21-25	26	14%
16-20	7	4%

CBP: Primary biliary cholangitis, AIH. Autoimmune hepatitis. CEP: Primary sclerosing cholangitis. NAFLD: Steatonepatitis not alcoholic. HCV: hepatitis C virus. HBV: hepatitis B virus. CLIF C ACLF: scale for mortality of acute on chronic liver failure. MELD: Model for end-stage liver disease

https://doi.org/10.1016/j.aohep.2024.101413

CLIF-C-ACLF scale to predict mortality in pediatric patients with acute-on-chronic liver failure

Diego R. Arellano-Sánchez, Elizabeth Hernández-Chávez

Pediatric Gastroenterology and Nutrition Service, UMAE Pediatric Hospital, Western National Medical Center, IMSS, Guadalajara Jalisco, Mexico

Introduction and Objectives: The acute decompensation of liver cirrhosis associated with organ failure is known as acute-on-chronic liver failure (ACLF); in pediatrics, it develops >22%, with mortality >33% per month; Based on prognosis, CLIF-C ACLF is a score with greater discriminative capacity to predict short-term mortality (25%) compared to already established scales, which require more complex variables. To describe the utility of the CLIF-C ACLF scale in pediatrics. Specific: In children with cirrhosis who developed ACLF: Describe the sociodemographic, clinical, and biochemical characteristics; Determine the MELD, PELD, Child Pugh, AARC and CLIF-C ACLF scales and compare their predictive value.

Materials and Patients: Retrospective cohort, age: 6 months to 18 years, temporality: March 2018 - February 2022. Frequency and percentage were reported for qualitative variables, and median variables and range for quantitative variables; Inferential with Pearson and Spearman correlation between the scales at admission, 28 and 90 days, an area under the receiver operating characteristics (AUROC) and Whitney U were calculated.

Results: Out of 95 cases with chronic liver disease, 63.1% presented ACLF, mostly stage II (35.3%). The female sex predominated (72.1%) and bile duct atresia was the most common entity (80%), with a mean age at diagnosis of 38 months and mortality of 55%. Ascites (97%) and hepatic encephalopathy (58.3%) were the main complications. The major precipitating factors described were infections (57.4%): bacterial cholangitis (16.2%) and pneumonia (8.8%). Through AUROC we compared CLIF cACLF with PELD, MELD, Child Pugh and AARC, observing greater statistical significance at 28 and 90 days (sensitivity: 0.63, specificity: 0.85) and through the U test, we observed that coagulopathy is the biochemical index with higher prediction for acute decompensation in ACLF.

Conclusions: CLIF-C ACLF compared to ACLF scores predicted increased risk of 28-day mortality (AUROC: 0.758) relative to PELD, MELD (AUROC: 0.721), Child Pugh (AUROC: 0.746), AARC (AUROC: 0.621), and at 90 days (AUROC: 0.663) with PELD, MELD (AUROC: 0.505), Child Pugh (AUROC: 0.598), AARC (AUROC: 0.357). We established a CLIF-C ACLF score \geq 77.5 as a high predictor of mortality (95% CI). The scale is useful in pediatrics.

Ethical statement

The protocol was registered and approved by the Ethics Committee. The identity of the patients is protected. Consentment was obtained.

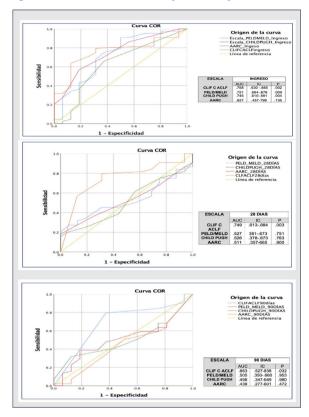
Declaration of interests

None

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

AUROC of CLIF-C ACLF, MELD/PELD, Child Pugh, AARC in predicting at admission, 28- and 90 - days mortality.



https://doi.org/10.1016/j.aohep.2024.101414

Extrahepatic disease in a cohort of HCV infected patients successfully treated with direct acting antivirals. One year follow up.

Clara C. Sánchez-Rodríguez¹, Jorge H. Luna-Domínguez²

Introduction and Objectives: The hepatitis C virus (HCV) infects hepatocytes and B lymphocytes. The ability to infect B lymphocytes has been linked to cryoglobulinemia, cryoglobulinemia syndrome, lymphomas, and organ-specific and systemic autoimmune diseases (AD). Among the AD, diabetes mellitus, thyroiditis, and Sjögren syndrome stand out as extrahepatic diseases (EH). The aim of a study was identify HCV-related EH, during infection and one year after successfully direct-acting antiviral (DAA) treatment

Materials and Patients: We conducted a prospective study in a Regional Hospital of reference for the treatment of Hepatitis C, from 14 hospital units in the Northeast of Mexico. From June 15, 2018, to January 1, 2023.

Results: Of 364 patients with positive serology, 153 had viremia, and 127 received DAA, with different schemes aligned to the guidelines of treatment of hepatitis C. 50% were women, with a mean age of 54, 80% received regimens based on sofosbuvir. 96,8% achieved a

sustained viral response 12. Before the treatment with DAA, we identified nine hypothyroidisms, eight cryoglobulinemic vasculitis, one with anemia and thrombocytopenia autoimmune, and 25 with diabetes. At basal visit for treatment, 17 hypothyroidisms, eight prediabetes, eight diabetes, one lymphoma, one monoclonal gammopathy of uncertain significance, three rheumatoid arthritis, and three hepatocellular carcinomas. At one year of follow-up, plus sixteen with diabetes mellitus, three with hepatocarcinoma, 6 with xerophthalmia, and one with breast cancer, increasing obesity, and fatty liver were identified.

Conclusions: EH is frequent and carries out morbidity, especially proliferative disorders of B lymphocytes and AD as some can persist even after the treatment of HCV infection. The intentional search for EH should be mandatory and, once identified, will be multidisciplinary follow-up, for the timely identification of worsening or malignant transformation, to offer timely diagnosis and treatment.

Ethical statement

The protocol was registered and approved by the Ethics Committee. The identity of the patients is protected. Consentment was obtained.

Declaration of interests

None

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors

https://doi.org/10.1016/j.aohep.2024.101415

Evaluation of the hepatoprotective effect of an hydroalcoholic extract of *Jatropha dioica* against the damage induced by valproic acid in Wistar rats

Ramiro Tijerina-Márquez^{1,2}, Oscar H. Mendoza-Hernández¹, César B. Espinosa-Cantú¹, Verónica M Rivas-Galindo³, Diana Moreno-Peña¹, Liliana Torres-González³, Linda E. Muñoz-Espinosa¹, Edelmiro Pérez-Rodríguez⁴, Idalia A. Cura-Esquivel⁵, Paula Cordero-Pérez¹

 Liver unit, Internal Medicine Department, University Hospital "Dr. José Eleuterio González", Universidad Autónoma de Nuevo León, Monterrey, Nuevo León
Fellow within the Dirección General de Calidad y Educación en Salud, Secretaría de Salud, México
Analytic Chemistry Department, School of Medicine, Universidad Autónoma de Nuevo León, Monterrey, Nuevo León

⁴ Organ and Tissue Transplant Service, Department of General Surgery, University Hospital "Dr. José Eleuterio González", Universidad Autónoma de Nuevo León, Monterrey, Nuevo León

⁵ Department of Pediatrics, University Hospital "Dr. José Eleuterio González", Universidad Autónoma de Nuevo León, Monterrey, Nuevo León

Introduction and Objectives: Liver diseases have gained importance due to their prevalence, incidence and because most chronic liver diseases have no cure, except for hepatitis C. Liver damage induced by drugs such as valproic acid (VPA) has been used to study therapeutic alternatives. *Jatropha dioica* may be one of these alternatives as it has metabolites with potential antioxidant activity. The objetive of this study was to evaluate the hepatoprotective effect of a hydroalcoholic extract of *J. dioica* against VPA-induced damage in Wistar rats.

¹ Department of Internal Medicine, Regional General Hospital 6, Madero City, Tamaulipas, México, Instituto Mexicano del Seguro Social (IMSS)

² Postgraduate unit of dentistry, research unit, Universidad Autonoma de Tamaulipas, Tampico, Tamaulipas, Mexico