

**O-7 PREVALENCE, CHARACTERIZATION AND SURVIVAL OF ACUTE-ON-CHRONIC LIVER FAILURE IN A CHILEAN UNIVERSITY HOSPITAL**

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**Background:** Acute-on-chronic liver failure (ACLF) is a serious clinical entity, with no previous reports in Chile.

**Aim:** To characterize patients with ACLF in a Chilean University Hospital, identifying triggers, organ failure and survival at 30, 90, 180 days, compared to patients with decompensated cirrhosis without ACLF.

**Methods:** Retrospective cohort study of decompensated cirrhotic patients hospitalized in a Chilean University Hospital between 2017-2019.

**Results:** 334 patients were included, 73 (22%) presented ACLF (33% ACLF-1, 30% ACLF-2, 37% ACLF-3); 16.4% underwent liver transplantation. Patients with ACLF were younger, and had higher MELD-Na and APACHE II on admission. The most common triggers in both groups were infections (42.4%), gastrointestinal bleeding (23.2%) and alcohol intake (31.3%). The main organ failures were kidney (60.2%) and brain (49.3%). All organ failures were more frequent in ACLF-3, except renal failure (greater in ACLF-1). Survival at 180 days was 74% in patients without ACLF and 58.3% in ACLF (p=0.004). Mortality was significantly higher in ACLF-2 and ACLF-3, when compared with patients without ACLF (HR 2.3 and 2.99, respectively; p<0.05). Transplant-free survival in cirrhotics without ACLF was 72.5% versus 43.1% with ACLF (p<0.001). The risk of mortality or transplantation was higher in ACLF-2 and ACLF-3, in contrast to patients without ACLF (HR 2.19 and 4.61, respectively; p <0.05).

**Conclusions:** ACLF is an entity of younger patients, with lower global and transplantation-free survival at 180 days and multiple organ failure compared to decompensated cirrhotics without ACLF.

**O-8 THE IMPORTANCE OF LYSOSOMAL ACID LIPASE DEFICIENCY IN THE ETIOLOGICAL INVESTIGATION OF CRYPTOGENIC LIVER DISEASE IN ADULTS: A MULTICENTER STUDY**

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**Background:** Lysosomal acid lipase deficiency (LAL-D) is a rare genetic disease associated with lipid metabolism deregulation leading to atherosclerosis, dyslipidemia, and hepatic steatosis, with potential progression to cirrhosis. Investigation of LAL-D in patients with chronic liver disease is not routinely performed in most centers.

**Aim:** The aim of this study was to evaluate whether it is worthwhile to investigate LAL-D in patients with liver disease of unknown etiology, and if there is any particular population that this search should be focused.

**Methods:** This was a multicenter cross-sectional study in 295 patients followed with presumed cryptogenic liver disease from four tertiary centers in Brazil. Clinical, demographic and laboratory data from participants were assessed, with the exclusion of all known causes of liver disease. All patients were submitted to the investigation of LAL enzyme activity. The exams were collected on dried blood spot (DBS).

**Results:** A total of 135 patients were included in the study. Three patients (2.22%) presented values of LAL below the reference limit, compatible with LAL-D. The mean age of these patients was 43.9±10.1 years, of which 2 were females. The mean BMI was 24.3±0.7 and mean serum glycemia was 89.7±3.2 mg/dL. The mean serum HDL and triglycerides were 21.7±3.2 mg/dL and 206.7±25.5 mg/dL, respectively.

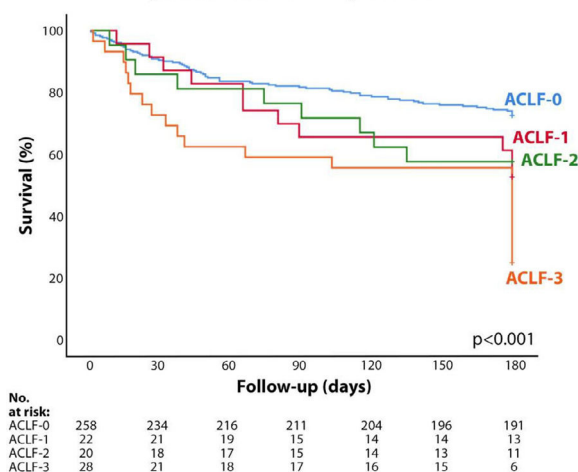
**Conclusion:** Despite being a rare disease, also in our study population, LAL-D investigation may be considered in those individuals without overweight with reduced serum HDL and elevated triglycerides levels and chronic liver disease of unknown etiology.

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**O-9 COMPARISON OF THE PERFORMANCE OF DIFFERENT SCORES FOR THE PREDICTION OF IN-HOSPITAL MORTALITY IN PATIENTS WITH CIRRHOSIS AND BACTERIAL INFECTIONS**

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Transplant-free survival according to presence and severity of ACLF



**Figure.-** Cumulative transplant-free survival according to the presence of ACLF and severity.

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**Background:** Predicting short-term mortality in patients with cirrhosis and bacterial infections is challenging.

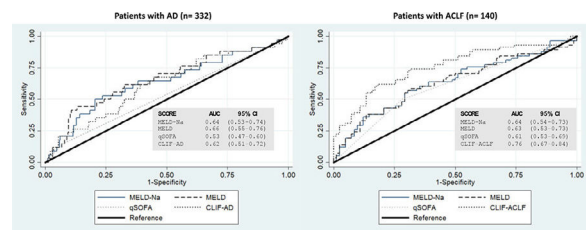
**Aims:** To compare the performance of various scores in predicting in-hospital mortality in this population.

**Methods:** We performed an analysis of the multicenter prospective cohort study of patients with cirrhosis with bacterial infections throughout Argentina and Uruguay (clinicaltrials.gov.NCT03919032). Patients were classified according to the CLIF criteria as having ACLF or mere acute decompensation (AD). We evaluated the performance of scores of liver disease and infection severity in predicting in-

hospital mortality. MELD, MELD-Na, and Quick SOFA (qSOFA) were computed in all patients. CLIF-AD was only computed in patients without ACLF, and CLIF-ACLF only in patients with ACLF. We plotted ROC curves and estimated their area under the curve (AUROC).

**Results:** We included 472 patients: 66% male, mean age 57 ± 12 years. Most frequent infections: SBP (30%) and urinary tract infection (25%). Overall, 332 (70%) patients had acute decompensation, and 140 (30%) ACLF. In-hospital mortality rate was 19%: 41% in patients with ACLF vs 10% in patients with AD ( $p < 0.001$ ). When we evaluated the AUROC of the entire cohort, MELD and MELD-Na performed similarly: 0.74 (95% CI 0.68–0.81) and 0.74 (95% CI 0.67–0.80), respectively; whereas qSOFA showed the lowest performance: 0.62 (95% CI 0.57–0.68). When evaluating only patients with ACLF, CLIF-ACLF performed significantly better than the other ones: AUROC 0.76 (95% CI 0.67–0.84,  $p = 0.01$ ). All scores performed poorly in patients with AD (Figure).

**Conclusion:** The best tool to predict in-hospital mortality in patients with infection-related ACLF was the CLIF-ACLF score. In patients with infection-related AD, all scores performed poorly. Evaluation of the scores performance is of paramount importance in different regions and for each complication of cirrhosis separately.



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### O-10 PRIMARY BILIARY CHOLANGITIS PATIENTS DIAGNOSED BY DIFFERENT COMBINATIONS OF THE DIAGNOSTIC CRITERIA PRESENT CLINICAL AND LABORATORY PECULIARITIES

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