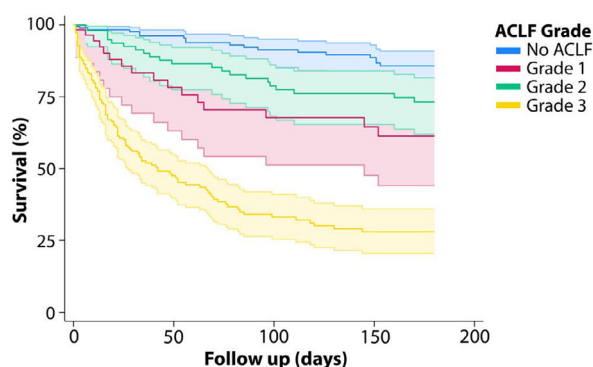


grade 3 should promptly be referred for early LT. The redefinition of ACLF in AH is essential for better quantifying the severity and determining therapeutic goals.

Cumulative survival in patients with alcohol-associated hepatitis according to Acute-on-chronic (ACLF) grade



No at risk					
No ACLF	186	126	107	94	80
Grade 1	59	31	26	21	18
Grade 2	110	71	62	57	46
Grade 3	223	63	35	28	24

Figure

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OP-6 EVALUATION OF THE HEPATOPROTECTIVE ACTIVITY OF *Flourensia cernua* AND ITS IMPACT ON THE AEROBIC INTESTINAL MICROBIOTA IN A VALPROIC ACID-INDUCED DAMAGE MODEL IN WISTAR RATS

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Conflict of interest: No

Introduction and Objectives: Liver disease is a health problem that accounts for more than 2 million deaths per year worldwide. Valproic acid (VPA) has been used as a hepatotoxic agent in animal

models to reproduce liver damage and test future therapeutic strategies. *Flourensia cernua* (Fc) is a plant that contains compounds with antioxidant activity, which may have a potential hepatoprotective effect.

The aim was to evaluate the hepatoprotective activity of *Flourensia cernua* and its impact on aerobic intestinal microbiota in a valproic acid-induced damage model in Wistar rats.

Patients / Materials and Methods: Seven groups were used (n=6): 1) Sham, 2) VPA, 500 mg/kg of VPA/d/7d i.p., 3) Fc extract at 200 mg/kg/d/3d p.o., 4) Fc extract at 400 mg/kg/d/3d p.o., 5) VPA + Fc 200 mg/kg/d/3d p.o., 6) VPA + Fc 400 mg/kg/d/3d p.o., 7) VPA + Silibinin 200 mg/kg/d/3d p.o.; subsequently, the animals were sacrificed, and samples of faeces, blood, and liver tissue were taken for aerobic intestinal microbiota (AIM), biochemical markers, oxidative stress, and histological analysis, respectively. Data was analyzed using Prism software (v. 10.0.0; GraphPad). $P < 0.05$ was statistically significant.

Results and Discussion: VPA significantly increased ALT, AST and decreased total proteins vs. Sham. There was no alteration of transaminases at both tested doses of Fc extract. Only the VPA + Fc 400 mg/kg group showed a significant reduction in ALT, AST, SOD, and MDA vs. VPA, similar to silibinin. The histological analysis did not show significant changes in the study groups. MALDI-TOF primarily identified *Klebsiella pneumoniae*, *Pseudomonas aeruginosa*, *Escherichia coli*, and *Ochrobactrum intermedium* as AIM in the different study groups.

Conclusions: The hydroalcoholic extract of *F. cernua* did not show toxicity at the evaluated doses, showed a hepatoprotective effect at 400 mg/kg, and did not modify AIM. VPA decreased AIM, and *F. cernua* showed a trend to partially restore the normal bacterial count, similar to silibinin.

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OP-7 Further exploration of differences between lean and non-lean metabolic dysfunction-associated steatotic liver disease (MASLD) in Latino subjects: PNPLA3 frequency and lipidomic profiles

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Conflict of interest: Yes, Fondecyt # 1241450

Introduction and Objectives: Background: There is limited information on features of lean MASLD patients in Latino subjects. We aimed to analyze the features of MASLD in Chilean patients with normal body mass index (BMI), the frequency of the rs738409 risk polymorphism (PNPLA3 I148M variant) and metabolomic profiles in Chilean individuals with MASLD.

Patients / Materials and Methods: A cross-sectional study involving 181 randomly-selected participants diagnosed with MASLD from the prospective Maule Cohort (BMC Public Health. 2016;16:122). Participants were categorized into lean, overweight, and obese groups

based on their BMI. The presence of the rs738409 polymorphism was examined using Sanger sequencing. Metabolomics was assessed using UHPLC-MS in a separate group of biopsy-proven MASLD patients. Statistical analyses of clinical data and genotypes encompassed Fisher's exact test, Chi-square test, Kruskal-Wallis test.

Results and Discussion: 31.49% (57) were classified as thin, 36.3% (61) as overweight and 39.8% (67) as obese. Higher ALT levels ($p=0.004$) and body fat percentage in obese subjects were the only significant differences found among the groups. The allelic frequency of rs738409 was similar among groups 77.1%, 83.6% and 82.5% in lean, overweight, and obese subjects, respectively (n.s.). Circulating metabolome showed increased levels of ceramides in overweight and obese patients compared to lean subjects ($p<0.001$ for five different species). The increment is higher if all the MASLD patients were considered (Figure). Serum bile acids, particularly chenodeoxycholic acid ($p<0.001$) and glycochenodeoxycholic acid ($p=0.024$), were also increased. Lipidomic analysis also showed an increase of polyunsaturated diglyceride and triglyceride species in overweight and obese compared to lean subjects. Among them, most of the species included linoleic acid or alpha-linoleic acid in their esterified chains.

Conclusions: PNPLA3 risk allele was equally frequent in lean and non-lean Chilean MASLD patients. Metabolomic differences were found with non-lean subjects exhibiting higher levels of ceramides and bile acid species compared with lean patients. (Supported by Fondecyt # 1241450)

