

has been poorly studied. The objective of this study is to report the effect of DXM in patients with cirrhosis and AWS.

Materials and Patients: Observational, retrospective, descriptive and analytical study. Patients with cirrhosis and AWS, treated with lorazepam, DXM, or both, were included. The Clinical Institute Withdrawal Assessment of Alcohol Scale (CIWA-Ar) data was collected before and after treatment, as well as the days of in-hospital stay (IHS). The quantitative variables were summarized using non-parametric descriptive statistics according to the distribution of the variables (average and range), as well as frequencies and percentages in the case of qualitative variables. To compare between three independent groups, the Kruskal-Wallis (KW) and Jonckheere-Terpstra (JT) tests were used. A significant difference was considered one with a value of $p < 0.05$.

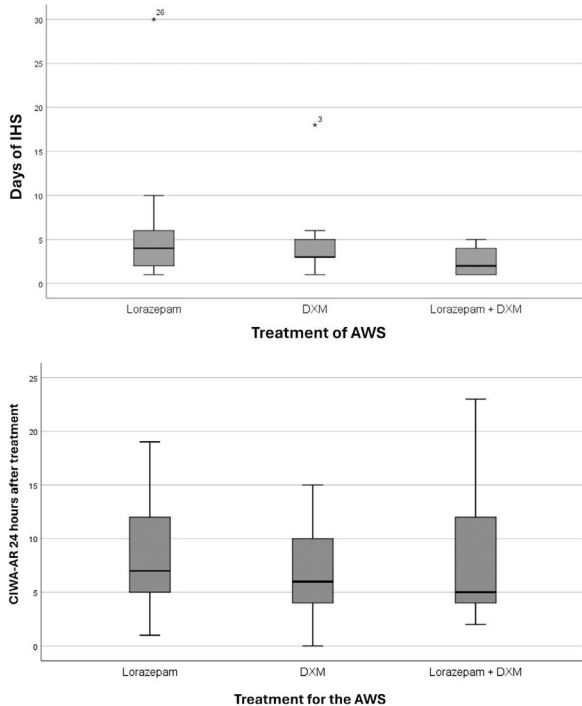
Results: 39 patients were included, 37 (94.9%) men, average age 41 (27-66) years, alcohol consumption 287 (64-960) g/day, CIWA-Ar at admission 20 (10-46) points, Child -Pugh 10 (5-14) points, MELD-Na 16 (8-40) points. Regarding the AWS treatment: 17 (43.6%) received lorazepam, 13 (33.3%) DXM, and 9 (23.1%) lorazepam + DXM. When compared between groups there were no differences in terms of days of IHS [4 (1-30) vs. 3 (1-18) vs. 2 (1-5) respectively for lorazepam, DXM, lorazepam + DXM; KW $p = 0.86$, JT $p = 0.82$], nor in terms of CIWA-Ar at 24 hours post-treatment [7 (1-19) vs. 6 (0-15) vs. 5 (2-23) respectively for lorazepam, DXM, lorazepam + DXM; KW $p = 0.19$, JT $p = 0.45$]. No serious adverse effects were reported with any of the three strategies.

Conclusions: DXM appears to be an effective and safe option for the treatment of AWS in patients with cirrhosis. However, clinical trials are required to validate our findings.

Ethical statement: The research was carried out in accordance with the World Medical Association Declaration of Helsinki of 2013.

Declaration of interests: None.

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AWS: Alcohol Withdrawal Syndrome; CIWA-Ar: Clinical Institute Withdrawal Assessment of Alcohol Scale; DXM: Dexmedetomidine; IHS: In-Hospital Stay.

Characterization of a population evaluated for hepatocarcinoma in a third-level center.

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Introduction and Objectives: Hepatocellular carcinoma is one of the most common cancers worldwide. Viral hepatitis, alcohol, and non-alcoholic fatty liver disease are important risk factors. To describe the clinical characteristics, staging, treatment, and outcomes of patients with HCC at a third-level hospital.

Materials and Patients: A retrospective, descriptive study was carried out from January 2021 to April 2024, in which 76 patients from the liver clinic consultation were included. Clinical characteristics, biochemical characteristics, staging and treatment were collected.

Results: The study included 76 patients, mean age 62 ± 8 (53.9% men); 88.1% of patients with cirrhosis; with the following etiologies: 30.2% due to MAFLD, 19.7% due to alcohol, 19.7% due to Hepatitis C and 18.4% due to other causes, With MELD 12 ± 6.22 , MELD Na 14.1 ± 5.4 , 67 patients were classified in BCLC, of which 13.4% are in stage A, 59.7% B, 10.4% C, and 16.4% D. 36 patients were candidates for treatment distributing in 52.7% Transarterial Chemoembolization (TACE), 11.1% ablation, 11.1% TACE and ablation;; 2.7% Medical (Lenvatinib), 8.3% medical and radiological (Nivolumab/Lenvatinib with TACE/ Ablation), 11.1% radiological (TACE) and transplant and 2.7% transplant. Treatment response evaluation according to mRESIST criteria: 11.1% complete response, 25% partial response, 33.3% stable disease and 27.7% progression. The 3-month mortality rate was 8.3%.

Conclusions: In our population group, mostly men, the most common etiology is MAFLD, two-thirds in intermediate stage, 47% were candidates for treatment, predominating the use of TACE. One-third remained with stable disease and 11.1% had a complete response. Mortality at 3 months was low.

Ethical statement: The authors declare that no patient data appear in this article.

Declaration of interests: None.

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Table 1
Characteristics of patients with HCC n = 76

Middle ages	62 ± 8 años
Male	41 (53.9)
Female	35 (46.0)
with cirrhosis	67 (88.1)
etiologies	
MAFLD	23 (30.2)
Alcohol	15 (19.7)
Hepatitis C	15 (19.7)
Other causes	14 (18.4)
MELD	12 ± 6.2
MELD-Na	14 ± 5.4
BCLC	
Stage A	9 (13.4)
Stage B	40 (59.7)
Stage C	7 (10.4)
Stage D	11 (16.4)
Candidates for treatment	36 (47.3)
Forms of treatment	

(continued)

TACE	19 (52.7)
Ablation	4 (11.1)
TACE + Ablation	4 (11.1)
Medical	1 (2.7)
Medical and radiological	3 (8.3)
Radiological and transplant	4 (11.1)
Transplant	1 (2.7)
Treatment response evaluation	
complete	4 (11.1)
Partial	9 (25)
Stable	11 (33.3)
Progression	10 (27.7)

BCLC, Barcelona Clinic Liver Cancer; HCC, Hepatocellular carcinoma; MAFLD, Metabolic dysfunction-associated fatty liver disease; MELD, Model for End-Stage Liver Disease; MELD-Na, Model for End-Stage Liver Disease-Sodium; TACE, Transarterial chemoembolization.

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Pirfenidone limits the progression of malignancy and slows the development of fibrosis in experimental hepatocarcinoma.

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Introduction and Objectives: Hepatocarcinoma (HCC) is the fourth cause of cancer death in Mexico, derived from fibrotic, metabolic and inflammatory alterations, modifiable by pirfenidone (PFD), which has shown beneficial effects at these levels. Our aim is to demonstrate the hepatoprotection of PFD in a model of HCC progression.

Materials and Patients: To evaluate the effect of PFD in a setting similar to that of patients at risk for HCC, we developed an experimental model of neoplastic progression, with damage induction for 9 weeks, followed by free progression of the disease. Male Fischer-344 strain rats (n=18) were divided into three groups: CTL: untreated control; HCCp: damage progression group (generated by administration of diethylnitrosamine (DEN) 50 mg/kg and 2-Acetaminofluorene (2AAF) 25 mg/kg weekly for 9 weeks and damage progression); and HCCp/PFD: damage progression group plus administration of PFD 300 mg/kg daily starting from week 9. The weight of the animals in the different study groups was recorded, and morphological and histopathological analyses of the liver were performed. H&E, Masson's Trichrome (MCT) and Sirius Red (SR) staining were performed, and GPC-3 and Ki-67 proteins were analyzed by immunohistochemistry. This was done in order to evaluate the presence and severity of fibrosis, malignancy and proliferation markers. Data were analyzed by ANOVA followed by Tukey's post-hoc tests to identify differences between study groups. Comparisons with p values ≤0.05 were considered significant.

Results: Treatment with PFD did not produce a difference in weight between the groups. However, it caused a tendency to decrease in body weight, net weight and relative liver weight. The morphological analysis of the liver of the HCCp/PFD group showed surface characteristics, coloration and consistency similar to the control, in addition to the evident attenuation in the progression of cancerous nodules, with a 34.02% reduction in the total tumor incidence. At the tissue level, PFD decreased the accumulation of extracellular matrix and collagen I and III deposition. The fibrotic bridges

present in the HCCp/PFD group are incipient and of interstitial disposition, contrary to the intensity and tissue restriction shown in the HCCp group. In addition, dysplastic changes were limited after PFD treatment, with a decrease in hyperchromasia and nuclear pleomorphism, fewer cells with loss of polarity and nucleus/cytoplasm ratio, together with a decrease in necrotic cells, as well as a decrease in ductal reaction and destruction of portal triads compared to the damage group. Finally, in the HCCp/PFD group, the expression of both GPC-3 and Ki-67 was reduced, slowing tumor progression.

Conclusions: PFD administration had a hepatoprotective effect on tumor progression and slowing of fibrosis in our experimental model based on our results, we can conclude that PFD could work at the level of primary prevention of HCC in patients with chronic liver disease.

Ethical statement: Our research with animal models is governed by the highest ethical and animal welfare standards. The use of animals was scientifically justified, minimizing their suffering and providing them with adequate living conditions. All regulations were complied with, and transparency and accountability in research were continuously re-evaluated and maintained.

Declaration of interests: None.

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The neutrophil-to-lymphocyte ratio (NLR) can predict the presence of bacterial infections in hospitalized patients with decompensated cirrhosis.

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Introduction and Objectives: Liver cirrhosis can increase susceptibility to bacterial infections, which are often underestimated due to subtle or absent symptoms and the absence of additional biochemical markers. Early identification of these infections is limited in these patients. The objective is to determine the effectiveness of the Neutrophil-to-Lymphocyte Ratio (NLR) as a predictor of bacterial infections in hospitalized patients.

Materials and Patients: The aim of this retrospective, observational, analytical, cross-sectional study was to validate a prognostic index for patients diagnosed with liver cirrhosis and hospitalized from October 2023 to March 2024. The study included variables such as age, sex, etiology of liver disease, decompensation events leading to hospitalization, and biochemical data to calculate MELD, Child-Pugh, MELD-Na scores, and the degree of acute-on-chronic liver failure upon admission using the EASL-CLIF-ACLF, European Association for the Study of the Liver - Chronic Liver Failure Acute-on-Chronic Liver Failure score. Additionally, the presence of bacterial infection was determined through laboratory tests, imaging studies, and corresponding cultures. The Neutrophil-to-Lymphocyte Ratio was established by dividing the respective total cell counts. The study summarized the variables using descriptive statistics and constructed the area under the curve (AUC-ROC) with 95% confidence intervals. A p-value <0.01 was considered significant.

Results: A total of 183 patients were included in the study. There were 93 (50.8%) men, with an average age of 55.8 ± 10 years. The