Evaluation of the MELNa AGIB Scale to Predict Mortality in Patients with Cirrhosis and Variceal Hemorrhage.

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Introduction and Objectives: Patients with decompensated cirrhosis are at risk of variceal hemorrhage, which increases the risk of mortality. Validated scales exist to assess this risk, but there is currently no scale that evaluates the risk of variceal hemorrhage and death simultaneously. The MELDNa AGIB (acute gastrointestinal bleeding) scale incorporates sodium (Na) levels, albumin levels, the corrected QT interval (QTc), and a history of hemorrhage to calculate mortality at 6 weeks. While it has been evaluated in other centers, further studies are needed to validate its utility. To evaluate the MELDNa-AGIB scale for predicting the risk of mortality in decompensated cirrhotic patients.

Materials and Patients: This was a retrospective, analytical, observational study conducted on a cohort of patients with decompensated cirrhosis and variceal hemorrhage. The MELDNAAGIB scale was calculated for each patient and compared with other scoring systems, including MELD, MELD NA, MELD LACTATE, and MELD 3.0, to assess its effectiveness. Statistical analysis involved the construction of ROC curves to determine the prognostic value of each scoring system in predicting mortality among patients with variceal bleeding. A significance level of p<0.05 was considered, and sensitivity and specificity were determined based on the cutoff points obtained from the significant ROC curves.

Results: A total of 32 patients were included in the study, of whom 56.2% were male, with an average age of 57±11. The etiologies of cirrhosis included alcohol-related, metabolic-associated fatty liver disease (MAFLD), dual injury, hepatitis C virus (HCV), autoimmune hepatitis (AIH), and unidentified causes (34.37%, 31.25%, 21.87%, 6.25%, 3.12%, 3.12%, respectively). Fifty percent of the patients had a prolonged QTc interval (>456ms) as calculated using the Fridericia formula, and 67.2% had a history of previous variceal hemorrhage. The MELDNa-AGIB scale demonstrated an area under the receiver operating characteristic (AUROC) curve of 0.849 (95% confidence interval: 0.681-0.950, p=0.004), with a sensitivity of 87.5% and specificity of 83% when a cutoff point of 17 was applied for MELDNa-AGIB. The AUROC for predicting mortality was significantly lower for MELD/Lactate.

Conclusions: Although the study group was small, the MELDNaAGIB scale showed significant performance in predicting 6-week mortality in patients who developed variceal hemorrhage.
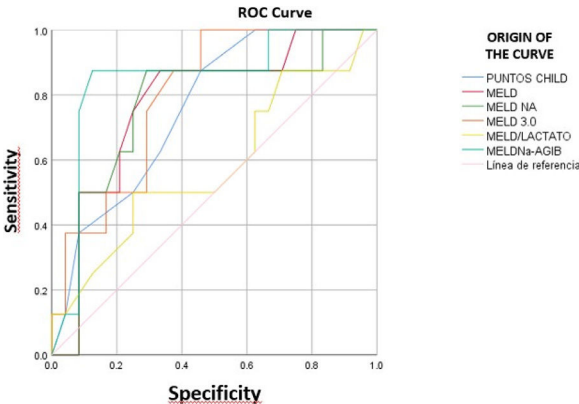
Ethical statement

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

Declaration of interests

None

Figure 1. Comparative analysis among different scales in patients with variceal hemorrhage and hepatic cirrhosis.

Validation of S-ANT for the diagnosis of minimal hepatic encephalopathy

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Introduction and Objectives: Hepatic encephalopathy (HE) is one of the most frequent complications of cirrhosis, minimal hepatic encephalopathy (MHE) is the initial stage and is characterized by the fact that it has no clinical data, its diagnosis is made with neuropsychological tests, the MHE produces a deterioration in the quality of life of patients and an increased risk of accidents. Hence, it is relevant to diagnose. Performing neuropsychological tests requires prolonged time, so validating an MHE count test that is easy, reproducible, and in less time is recommended. The simplified-animal naming test (S-ANT) test is performed by asking the patient to nominate 20 animals in one minute. In the reference cutoff for the non-Mexican population, a score lower than 15 suggests MHE.

We aimed to assess the validity of the S-ANT scale as a screening test in patients with cirrhosis without overt HE.

Materials and Patients: We present a prospective, descriptive, and analytical study of patients with cirrhosis of different etiology

without overt HE who underwent S-ANT, PHES, and Flicker tests. We determine the area under the receiver operator characteristic (AUROC) curve to validate the S-ANT test. MHE was detected if the PHES and Flicker tests were abnormal.

We compared the S-ANT scores of both groups with and without MHE with the student's t-test for independent groups. Sensitivity (S) and specificity (SE) were calculated with the AUROC cutoff point for MHE.

Results: Detection of MHE was in 12/83 patients (14.5%); 43 (51.83%) women, mean age 52.7 $\pm$ 7.5 years, median schooling 8.3 years (range 0-17), the etiology of cirrhosis was: 39 (47.0%) alcohol, 9 (28.9%) primary biliary cirrhosis, 17 (20.5%) metabolic fatty liver, 18 (21.7%) hepatitis C virus According to Child-Pugh: 57 (68.7%) A, 25 (30.1%) B, and 1 (1.2%) C. The mean S-ANT for non-MHE was 19.35$\pm$5.4, and for MHE, 14.7$\pm$5.6, p=0.024 AUROC was significant .760 (.577- .942, 95%CI); p=0.037 with S=83% and SE=77% cutoff= 17.5 words, which is higher than for other populations.

Conclusions: In the Mexican population, S-ANT reliably discriminates against patients with cirrhosis without overt HE with cognitive impairment, confirmed by PHES and Flicker test
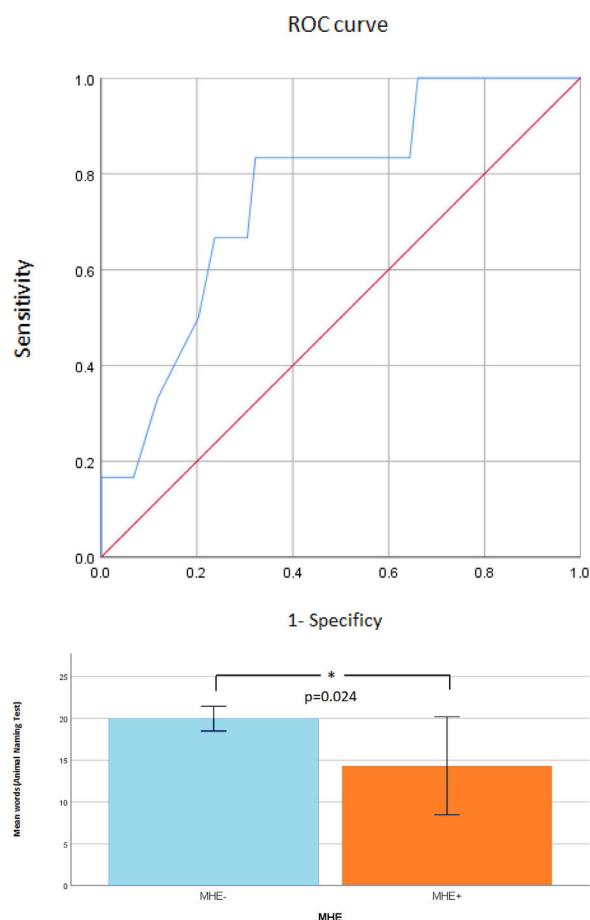
Ethical statement

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

Declaration of interests

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ROC curve

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Hepatitis secondary to consumption of piñalim

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Introduction and Objectives: The use of natural products without proper assessment is common and favored by the popularity of phytotherapeutics. The regulations related to the prescription and use of these products are scarce, which leads to their being widely used in self-medication. We present the clinical case of a woman who consumed piñalim and presented hepatotoxicity

Materials and Patients: A 29-year-old woman without significant history. She was admitted to the general surgery service for cholecystectomy. After preoperative evaluation, abnormalities in liver function tests (LFT) stood out, for which reason they intentionally asked about the consumption of alcohol, drugs, supplements or herbal and/or homeopathic products, referring to the daily consumption during the last year of PIÑALIM (red, green and white tea) in order to lose weight. Ultrasound of the liver and bile ducts reported: liver of normal shape, size and situation, with no evidence of solid or cystic lesions. Bile duct without dilatation. Gallbladder with a 5.6mm thick wall, without images suggestive of stones. The surgical report showed a lack of findings in the gallbladder and liver. The jaundice and altered LFT persisted in the postoperative period (mixed pattern); additional tests were performed: HBV-HCV-HAV-HIV viral panel: TORCH negative. Negative Tomography of the abdomen without relevant findings. ANA: Negative Until now, the only hepatotoxic agent identified (PIÑALIM) had already been suspended, so this behavior was maintained, avoiding the consumption of any drug. In the following control, the LFT maintained a downward trend, until normalizing 6 months after the definitive suspension of the infusion. (Table 1)

Results: After the definitive suspension of the tea, the LFT were normalized, thus concluding the direct relationship of the product by having a score on the CIOM/RUCAM scale of 9 (definitive cause of hepatotoxicity).

Conclusions: The report of hepatitis associated with infusions is becoming more frequent, it is important to raise awareness about our patients in the "non-safety" of natural products and in the medical team to alert about these products and avoid procedures unnecessary surgeries.

Ethical statement

The identity of the patients is protected. Consentment was obtained.

Declaration of interests

None

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Table 1
Liver Function Tests

Preoperative	Postoperative	6 months of suspension of the hepatotoxic
TB:11.1mg/dl, DB:8.1mg/dl, IB:3.0mg/dl, TSA: 159U/L, TLA: 356U/L, AF: 281U/L, HDL: 545U/L, TGG:459U/L	TB: 8.0mg/dl, DB: 6.3mg/dl, IB: 1.7mg/dl, TSA: 111U/L, TLA: 242U/L, AF: 180U/L, HDL: 400U/L y TGG: 298U/L	TB: 1.3mg/dl, DB: 0.7mg/dl, IB: 0.6mg/dl, TSA: 36U/L, TLA: 44U/L, AF: 120U/L, HDL: 250U/L y TGG: 66U/L

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