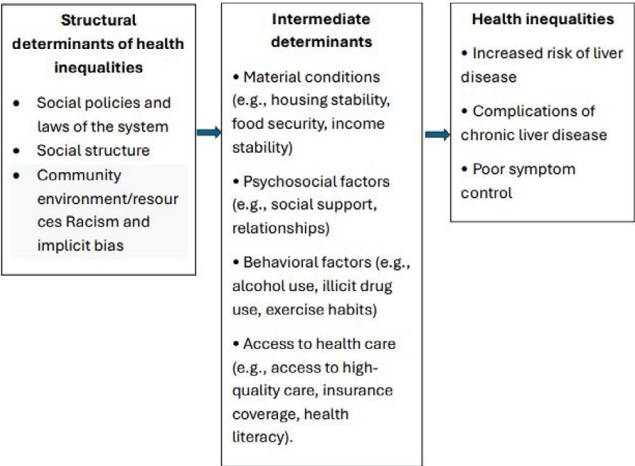


Alcohol-related liver diseases are a public health problem and remain underestimated. Within alcoholic beverages, those of artisanal production such as chicha and guarapo are so cheap and easy to manufacture while they meet basic needs such as quenching thirst and hunger, and their production is not controlled, alcohol content exceeds regulatory levels, translating into high health care expenditures, and requires culturally accepted interventions.

Conclusions: The global burden of cirrhosis is substantial, therefore, ongoing efforts to address it require accurate estimates of epidemiology, study of its social determinants, and establishing public health interventions to decrease the burden of the disease and thus the pressure on the health system.



Conceptual framework of the contribution of social determinants of health inequities, adapted to liver disease. Structural determinants lead to differential exposures to intermediate factors, which in turn generate differential vulnerabilities and create health inequities

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P-60 CAN A DOPPLER ULTRASOUND PREDICT VARICEAL HEMORRHAGE AND CORRELATE WITH THE MELD 3.0 SCORE IN LIVER CIRRHOSIS PATIENTS? A RETROSPECTIVE STUDY

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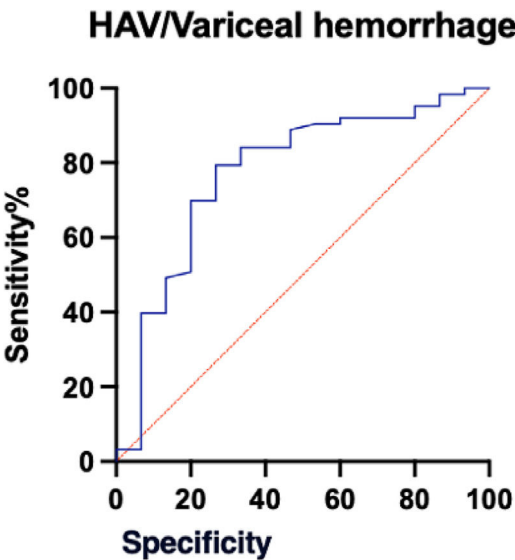
Conflict of interest: No

Introduction and Objectives: Liver cirrhosis, a major global health issue, causes blood flow resistance and portal hypertension. This study uses Doppler ultrasound to correlate hemodynamic changes with MELD 3.0 scores and variceal hemorrhage. Portal vein velocity, hepatic artery velocity, and hepatic artery resistance index were retrospectively evaluated in 2023 patients.

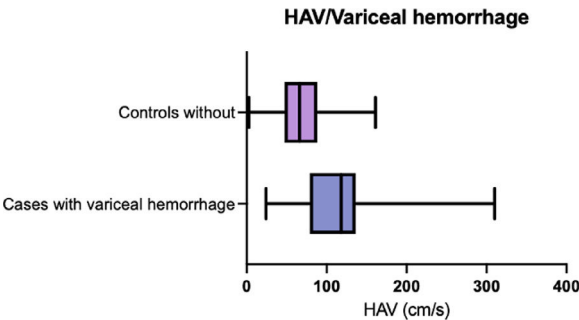
Patients / Materials and Methods: Data analysis was performed at the end of the study using GraphPad Prism version 10.2.3 and Microsoft Excel software. Individual correlation analysis was conducted between the hemodynamic variables and the MELD 3.0 score using Spearman's correlation coefficient. A Mann-Whitney test was performed to determine the association between HAV and variceal hemorrhage based on non-normal distribution data. The cut-off point was established with a ROC curve according to the Youden Value.

Results and Discussion: Seventy-nine cirrhotic patients (56% men, 54% women; mean age 58.8 years) had varied etiologies: 44 alcohol-related, 10 metabolic, and 25 other. Average MELD 3.0 score was 15 (range: 6-70). Fifteen patients had variceal hemorrhage within 6 months (mean 76.8 days; 6-178). HAV correlated significantly with hemorrhage (mean 188 cm/s vs. 66.0 cm/s; $p = 0.0007$), with a cut-off of 115 cm/s (88% sensitivity, 53% specificity). HAV moderately correlated with MELD 3.0 ($r = 0.3942$, $p = 0.0003$); HARI-MELD 3.0 showed a weak inverse correlation ($r = -0.02190$); PVV-MELD 3.0 had no significant correlation.

Conclusions: HAV correlates positively with the MELD 3.0 score and is positively associated with variceal hemorrhage in patients with liver cirrhosis. Given its non-invasive nature and greater accessibility compared to endoscopic studies, HAV could be considered a tool for screening variceal hemorrhage.



ROC CURVE



HAV/variceal hemorrhage correlation.

Table 1. Association with MELD 3.0.

Variable	Spearman correlation coefficient	P
Hepatic artery velocity (HAV)	0.3942	0.0003
Hepatic artery resistance index (HARI)	-0.02190	0.8490
Portal vein velocity (PVV)	0.08253	0.4725

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