

treatment received, and survival outcomes. Statistical analysis was performed using descriptive statistics, medians and interquartile ranges for continuous variables and absolute and relative frequencies for categorical data.

Results: Most patients were male (63.3%) with a mean age of 66 ± 9.1 years. Perihilar tumors were the most frequent subtype (46.7%), followed by intrahepatic tumors (36.7%). Jaundice (73.3%) and abdominal pain (56.7%) were the most common presenting symptoms. A history of smoking (60%) and alcohol use (40%) was frequent. Diagnostic imaging was initiated with ultrasound in 93.3% of cases complemented by CT scans (83.3%) and MRCP (70%). Elevated CA 19-9 levels were observed in 80% of patients. Only 23.3% of patients were eligible for curative surgery. Most received palliative chemotherapy. Biliary drainage was required in 43.3%. Overall survival was 43% at one year and declined to 20% at two years.

Conclusions: These results highlight the need for earlier recognition and timely referral to specialized, multidisciplinary centers to improve the management and prognosis of this challenging disease.

Conflict of interest: None

Clinical and Diagnostic Finding	Frequency / Percentage
Total patients	30
Most common type	Perihilar (n=14, 46.7%)
Average age	66 ± 9.1 years
Male sex	n=19 (63.3%)
Jaundice	n=22 (73.3%)
Abdominal pain	n=17 (56.7%)
Weight loss	n=15 (50%)
Primary sclerosing cholangitis	n=4 (13%)
Chronic liver disease	n=8 (26.7%)
Smoking	n=18 (60%)
Alcohol use	n=12 (40%)
Ultrasound as initial study	n=28 (93.3%)
Computed tomography	n=25 (83.3%)
MR cholangiography	n=21 (70%)
ERCP performed	n=17 (56.7%)
Elevated CA 19-9	n=24 (80%)
Eligible for curative surgery	n=7 (23.3%)
Chemotherapy (cisplatin + gemcitabine)	n=17 (56.7%)
Biliary drainage (endoscopic / IR)	n=11 (38%) / n=19 (62%)
Palliative care only	n=6 (20%)
12-month survival	n=13 (43%)
24-month survival	n=6 (20%)

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MICROPLANNING WORKSHOPS: STRUCTURING CARE PATHWAYS AS A STRATEGY FOR VIRAL HEPATITIS ELIMINATION

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Introduction and Objectives: Viral hepatitis represents a significant public health issue in Brazil. Considering the territorial diversity and challenges in service organization, specific strategies are necessary to support states and municipalities in addressing the disease. To present the experience of microplanning workshops conducted by

the Ministry of Health to support the development and implementation of the Viral Hepatitis Care Pathway (VHCP) across territories as a strategy to eliminate the disease by 2030.

Materials and Methods: The workshops use active learning methodologies, including dialogued presentations and group dynamics, to identify challenges, facilitators, and strategies for implementing the VHCP. Activities were adapted to each state's context. To evaluate learning, a questionnaire with 10 questions on viral hepatitis was administered before and after the theoretical content.

Results: In 2024, six workshops were held, five in the North Region (Acre, Amapá, Pará, Rondônia, and Roraima) and one in the Southeast (including Rio de Janeiro, São Paulo, Espírito Santo, and Minas Gerais), training around 500 professionals. There was a significant increase in knowledge about viral hepatitis. Challenges identified included high staff turnover, shortage of qualified teams, difficulty accessing remote populations, low adherence to testing and vaccination efforts, and lack of protocols. Facilitators included the availability of supplies, vaccination, training sessions, dialogue with communities, and the presence of professionals in management roles. In 2025, the Guide for the Elimination of Viral Hepatitis was launched, along with an operationalization workshop for managers. Six more workshops are planned for the second semester, and a Best Practices Seal will be awarded to health regions that formalize the care line in CIB (Bipartite Interagency Commission).

Conclusions: The workshops and the guide strengthen the organization of services and contribute to the elimination of viral hepatitis. The Best Practices Seal recognizes the efforts of territories in responding to the disease.

Conflict of interest: None

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#195

OMEGA-5 FATTY ACID NANO AS AN ADJUVANT THAT REDUCES OXIDA-INFLAMMATION IN PATIENTS WITH SEVERE ALCOHOL-ASSOCIATED HEPATITIS

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Introduction and Objectives: Severe alcohol-associated hepatitis (SAAH) is characterized by antioxidant deficiencies and heightened inflammation. Omega-5 fatty acid (nano=Granagard®) has been shown antioxidant and anti-inflammatory properties.

To evaluate the efficacy of Omega-5 fatty acid (nano) as an adjuvant to prednisone in modulating oxidative and proinflammatory parameters in SAAH.

Patients / Materials and Methods: Randomized, double-blind, placebo-controlled clinical trial (NCT 03732586) was conducted at a single center in Mexico. Patients with confirmed SAAH (MDF ≥32)

were randomly assigned to Group P (prednisone 40 mg/day + placebo) or Group T (prednisone 40 mg/day + Omega-5 (nano) at 1.28 g/day), administered for 28 days. Biochemical markers of liver function, nutritional evaluation, malondialdehyde (MDA), protein carbonyls (PC), reduced glutathione (GSH), oxidized glutathione (GSSG), and the GSH/GSSG ratio in blood were assessed. Additionally, cytokines, chemokines MCP-1, CXCL-8 and 10) and growth factors (IGFBP-1 to 7), were measured at baseline (day 0) and on days 7, 14, and 28.

Results: Both groups exhibited similar steroid responses with Lille scores ($p > 0.05$). Liver function tests revealed improved in Group T at day 28 ($p < 0.05$). Analysis for lipid peroxidation (MDA) was improved ($p = 0.001$) at 28 days in group T vs group P. The GSH/GSSG ratio also showed differences with the use of Omega-5. IL-10 levels (pg/mL) significantly increased in Group T, while MCP-1, CXCL-8 and CXCL10 levels (pg/mL) showed marked reduction by day 28 vs day 0. Additionally, IGFBP 1, 2, 3 and 7 levels (ng/mL) in Group T were significantly reduced.

Conclusions: Addition to Omega-5 fatty acid (nano) to prednisone strongly showed a beneficial effect in SAAH, promoting the reduction of oxidative stress, modulating cytokines and IGFBP levels. A phase 3 clinical trial is performed to further elucidate molecular mechanisms and explore the correct dosing regimens.

Conflict of interest: None

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#196

LAPAROSCOPIC LIVER RESECTION AS A TREATMENT FOR EARLY-STAGE HEPATOCELLULAR CARCINOMA IN PATIENTS WITH AND WITHOUT PORTAL HYPERTENSION: A CASE-CONTROL STUDY

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Introduction and Objectives: In patients with early-stage Hepatocellular Carcinoma (HCC), liver transplantation is the ideal treatment, but it is not universally available. Laparoscopic Liver Resection (LLR) offers comparable outcomes and is recommended for patients without clinically significant portal hypertension (CSPH). This study aimed to compare perioperative and short-term outcomes of LLR in cirrhotic patients with early-stage HCC, with and without CSPH.

Patients and Methods: This retrospective case-control study included 40 cirrhotic patients with early-stage HCC who underwent LLR between 2016–2023 at a university hospital. Clinical and demographic variables, indirect signs of portal hypertension and HVPG were recorded. Patients were divided into two groups, presence or absence of CSPH (HVPG > 10 mmHg or clinical signs of portal hypertension). The non-CSPH group included 15 patients (37.5%) and the CSPH included 25 patients (62.5%), with a median HVPG of 16 [11–26] mmHg. Median follow-up was 25 [2–89] months. Perioperative variables and outcomes up to 90 days post-surgery, as well as clinical follow-up data, were compared. Fisher's exact test and Kaplan-Meier survival analysis with the log-rank test were used for statistical analysis. A p -value < 0.05 was considered statistically significant.

Results: There were no differences in baseline characteristics or preoperative tumor size between the groups. A total of 78% of

LLRs were anatomical segmentectomies. Intraoperative variables showed no significant differences. No 90-day mortality was observed. No significant differences were found in postoperative rates of ascites (13% vs. 24%), post-hepatectomy liver failure (13% vs. 0%), encephalopathy (0 vs. 4%), decompensation (20% in both), or infections. The median ICU stay was 4 days for both groups. Positive surgical margins (R1) were also similar (7% vs. 12%). Overall survival rates at 1 and 3 years were 100% and 78%, respectively, with no significant differences ($p = 0.1448$).

Conclusions: In patients with CSPH, early postoperative outcomes and short-term survival were comparable to those patients without CSPH.

Conflict of interest: None

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IGFBPS, MMPS, AND CYTOKINES IN LIVER FIBROSIS: COMPARATIVE NON-INVASIVE BIOMARKER ANALYSIS.

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Introduction and Objectives: Identifying serum biomarkers capable of effectively distinguishing fibrosis stages is critical for early diagnosis and therapeutic monitoring in chronic liver disease. Objective: To evaluate the diagnostic performance of IGFBP proteins, cytokines, and matrix metalloproteinases (MMPs) across different fibrosis stages.

Patients and Methods: A prospective, cross-sectional, multicenter study was conducted. Untreated patients with chronic hepatitis C (cHC) were recruited and classified using FibroTest® and/or FibroScan®. Receiver operating characteristic (ROC) curves were analyzed to compare serum levels of IGFBP 1-7 (ng/ml), cytokines (IL-1a, IL-2, IL-10, IL-12p70; pg/ml), and MMPs (2, 7 and 9; ng/ml) between F0, F1F2, and F3F4 fibrosis groups. Statistical significance was set at $p < 0.05$, and area under the curve (AUC), sensitivity (Se), and specificity (Sp) were reported.

Results: A total of 461 cHC patients met inclusion criteria and were classified into F0 ($n = 130$), F1–F2 ($n = 55$), and F3–F4 ($n = 216$). For advanced fibrosis (F3F4 vs F0), IGFBP-4 had the highest performance, followed by IGFBP-5, IGFBP-2, and IGFBP-7, the latter with the highest specificity (91.4%). IGFBP-3 also reached significance. Among cytokines and MMPs, IL-10 and MMP-7 discriminated F1F2 vs F3F4 (Table).

Conclusions: IGFBP-4, IGFBP-5, IGFBP-7, and IL-10 showed significant accuracy in distinguishing fibrosis stages, particularly in identifying advanced fibrosis. Their high specificity and robust AUC values support their role as non-invasive biomarkers that may complement