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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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