Materials and Patients: A 43-year-old woman, blood group A+, with a history of HCV-related liver cirrhosis and BCLC-A hepatocellular carcinoma, was chosen for a liver transplant. Surgery was uneventful, requiring the transfusion of an O+ blood unit. The postoperative evolution was carried out without complications. On day 10. after the transplant, she presented a drop of 3 g/dL in hemoglobin, leukocytosis, elevated acute phase reactants, and mixed hyperbilirubinemia. An esophagogastroduodenoscopy and colonoscopy showed no active bleeding. The hemolysis profile showed a decrease in the haptoglobin value and an increase in DHL, negative Coombs, without schistocytes. An MRCP was requested, with no evidence of bile leakage or active bleeding. Because of the suspicion of hemolysis due to drugs, tacrolimus was changed to mycophenolate mofetil, and because of possible hemolysis due to sepsis, broad-spectrum antibiotic coverage was added without improvement. On day 14, there was a suspicion of transient lymphocyte syndrome. Isohemagglutinin levels were requested and became positive, and two O+ blood units were transfused. The following day, she presented a significant improvement in all laboratory parameters, and on day 20 she was discharged from the hospital without any abnormality in her laboratory parameters.

**Results:** In our management of hemolytic anemia after liver transplantation, two theories initially emerged: 1) Hemolysis due to tacrolimus, for which it was suspended and changed to mycophenolate mofetil, and 2) Hemolysis due to sepsis, due to leukocytosis and inflammation, initiating coverage with meropenem and vancomycin. But without improvement after both interventions. Finally, due to suspicion of transient lymphocyte syndrome, isohemagglutitins were requested and were positive, and after the transfusion of 2 O+ blood units, containing anti-A+ antibodies, she showed improvement, confirming the diagnosis.

**Conclusions:** In the passenger lymphocyte syndrome, there is a donor B lymphocyte production of antibodies causing a primary or secondary response to recipient erythrocytes. The incidence is higher in the heart-lung transplant, followed by liver transplantation. The risk also increases according to the donor-recipient ABO mismatch, being more common with group O donors and group A recipient (61%), followed by group O donors and group B recipients (22%). The clinical picture is characterized by fever, diarrhea, rash and hemolysis. The hemolysis usually occurs on days 3 to 24 after the liver transplantation and tends to be mild and self-limited. The diagnosis is made when the recipient had a positive direct antiglobulin test and there were donor antibodies in the serum against the recipient's red blood cell antigens. Treatment options include the transfusion of O red blood cell units and, in cases of severe hemolysis, immunosuppressors or plasmapheresis.

## **Ethical statement**

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

#### **Declaration of interests**

None

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None

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Effect of the combination of orlistat and lcarnitine on the quality of life (sf-36) in 16 overweigth patients. a preliminary result

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**Introduction and Objectives:** Orlistat is a drug widely used in overweight/obese patients, while the combination with 1-carnitine could offer an improvement in its effectiveness. To our knowledge, the effect of this combination on the quality of life of overweight patients has not been determined.

To evaluate the effects on the quality of life of patients who took the combination of orlistat and l-carnitine at 4 and 8 weeks of treatment.

**Materials and Patients:** : We evaluated the quality of life (Short Form-36) in 16 patients [41.81±8.26 (37.77-45.86) years, 81% women] undergoing pharmacotherapy of the combination of orlistat and 1-carnitine (once a day) at 4 and 8 weeks of treatment. Data express mean±SD and 95%IC or percentages as correspond. We use paired Student t Test, two tails with an alpha=0.05.

**Results:** Patients lowered their weight by about 3%. Patients show improvement in body pain, general health, vitality and in both Mental [ $45.68\pm6.51$  (42.49-48.86) vs.  $49.88\pm3.21$  (48.31-51.46), p=0.02] and Physical [ $59.4\pm8.92$  (55.03-63.77) vs.  $63.36\pm9.64$  (58.63-68.08), p=0.01) summaries.

**Conclusions:** These results suggest a beneficial effect of the combination of Orlistat and 1-carnitine on the treatment of overweight. Further studies compared with placebo and standard care are required.

#### **Ethical statement**

The protocol was approved by the local research and ethical committees.

Registration number: DECS/JPO-CT-1944-2023.

# **Declaration of interests**

None

#### **Funding**

Laboratorios Liomont provided the medicament "orlistat and l-carnitine" for this study.

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# METS-IR and its correlation with the diagnosis of nonalcoholic fatty liver disease corroborated by elastography.

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**Introduction and Objectives:** Nonalcoholic fatty liver disease (NAFLD) has become the leading cause of chronic liver disease worldwide, with a prevalence ranging from 25% to 40% (1,2). Its increase

has been related in parallel to the increase in the prevalence of obesity, insulin resistance (IR), type 2 diabetes (T2D) and other components of the metabolic syndrome (3).

Abstracts

Insulin resistance (IR) has been characterized as the main factor in the pathogenesis of NAFLD, and in turn, the presence of T2D is a predictor of advanced fibrosis and mortality (4). Insulin resistance assessments often require invasive and expensive methods, which has generated the search for indirect measures and precise RI. Currently, non-insulin based fasting IR indices have been developed, substituting insulin measurements for triglyceride measurements, fasting glucose and lipoproteins (5).

Recently, a novel surrogate index was developed to estimate the action of insulin without the determination of insulin. The metabolic score for insulin resistance (METS-IR) is calculated using fasting glucose, triglyceride, and HDLc measurements along with body mass index (BMI). METS-IR is an indirect method that correlates with fat intravisceral, intrahepatic and intrapancreatic and is useful for the prediction of T2D (5).

The identification of risk factors for NAFLD development and the availability of non-invasive tests for its diagnosis, offers a window of timely interventions that can modify the outcome of patients, improve the quality of life and reduce its impact on public health.

The primary objective in this work is to determine if there is a correlation between metabolic score for insulin resistance and the grade of hepatic steatosis in nonalcoholic fatty liver disease corroborated by elastography, in patients from Juarez Hospital of Mexico.

**Materials and Patients:** A retrospective, cross-sectional and analytical study was carried out. Patients aged 15 to 85 years were included, who had a diagnostic elastography and who had a diagnosis of NAFLD. Within the exclusion criteria, patients diagnosed with T2D who were under medical treatment, hepatitis B and C virus infection, history of autoimmune liver disease and history of chronic alcohol consumption, with a consumption greater than 30 g in men and 20 g in women, patients diagnosed with liver cirrhosis under medical treatment, patients with cholestatic syndrome and pregnant patients.

Descriptive statistics were performed with measures of central tendency and dispersion, inferential statistics using T student, and the correlations were determined with Pearson's correlation coefficient, being statistically significant P < 0.05.

**Results:** Elastographies with reports of fatty infiltrations and fibrosis and were gathered carried out between January 2017 and December 2018 in the Liver Clinic of the Gastroenterology service of the Juárez Hospital of Mexico. 283 elastography reports were obtained, of which, due to non-inclusion criteria, 207 were discarded, leaving a total of 76 patients for statistical analysis.

Within this population, 23.7% (n = 18) were men and 76.3% (n = 58) are women. According to the definitions of body mass index, the population was classified as normal weight, overweight and obesity. The population with normal BMI was 15.8% (n = 12) of the population, overweight patients in 48.7% (in = 37) and patients with obesity in 35.5% (in = 27). The main number of patients was found in the overweight group, being higher in the group of women, with 48.3% (n = 28).

A correlation was made between the METS-IR with the degree of fat infiltration and liver fibrosis, and a correlation of fat infiltration with body mass index. Correlation was obtained between the METS-IR index with the degree of fatty infiltration with statistical significance (p = 0.029) in general and a correlation with any METS-IR index value and the different degrees of hepatic steatosis in particular.

**Conclusions:** The METS-IR index is a novel method for determining insulin resistance in patients with metabolic risk factors. This is

the first study to evaluate the relationship of the METS-IR index with NAFLD, and the correlation between IR and hepatic fat infiltration was verified. The higher the value of METS-IR, the greater the presence of fat infiltration. We consider the METS-IR as a valuable screening tool for liver disease in a population whose access to invasive diagnostic studies is limited.

## **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

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None

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Prolonged-release pirfenidone in patients with compensated cirrhosis. Final results of the multicenter study ODISEA, controlled against placebo, plus standardized care 2023

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**Introduction and Objectives:** Advanced liver fibrosis (ALF) is a predictor of adverse prognosis in chronic liver disease. In addition to etiological treatment, a new approach to stop or reverse residual fibrosis would be desirable. Our aim was to assess the efficacy and safety of a prolonged-release pirfenidone formulation (PR-PFD) compared to placebo, plus standardized care, in patients with compensated liver cirrhosis.

**Materials and Patients:** 180 patients with ALF (F4 by elastography) of various causes were randomly assigned to 3 groups: placebo (G1), PR-PFD: 1200 mg/d (G2) or 1800 mg/d (G3), plus standardized care, during 24 months. All participants underwent standard lab tests, quality of life assessment, elastography, fibrotest, liver US, and endoscopy at baseline and at 12 and 24 months. Ethics Committee Registry H14-004. Patients signed an informed consent, which will be in custody for 15 years. This study was funded by CellPharma Laboratory.

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