

### P-31 NORMAL TRANSAMINASES IN OBESE PATIENTS WITH METABOLIC ASSOCIATED STEATOHEPATITIS

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**Introduction:** Metabolic associated fatty liver disease (MAFLD) and metabolic associated steatohepatitis (MASH) are the most frequent causes of chronic liver disease. Measurement of transaminases may not correlate with the severity of histopathological changes.

**Objective:** We aimed to identify the frequency of normal and elevated transaminases in obese patients with MASH, as well as their clinical, biochemical and histological characteristics.

**Methods:** A retrospective cross-sectional study was conducted in the bariatric surgery service of a private clinic. Obese patients older than 18 years with a body mass index (BMI) >30Kg/m<sup>2</sup> and 2 comorbidities undergoing a gastric sleeve surgery were included. Measurement of biochemical routine laboratory exams was performed. Insulin resistance was calculated using the homeostasis evaluation model (HOMA-IR). All patients underwent liver biopsies prior to surgery and the diagnosis of MASH was based on the Brunt criteria.

**Results:** 159 obese patients with MASH were included, of which 47.2% had normal transaminases and 52.8% elevated transaminases. Factors associated with alteration in transaminases were: being male OR=4.02 (95% CI: 2.03-7.96; p<0.01), diagnosis of type 2 diabetes mellitus OR=4.86 (95% CI: 1.97-11.95; p<0.01) and levels of GGT >50 IU/L OR=7.50 (95% CI: 3.40-16.56; p<0.01). The values of HOMA-IR and GGT were significantly higher in the group of high transaminases (p<0.01). Differences in the degree of fibrosis were not associated with transaminases levels.

**Conclusions:** In conclusion we found that 47.2% of obese patients with MASH had normal transaminases. The degree of fibrosis was not associated with transaminases levels.

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### P-32 EVALUATION OF HEPATIC FIBROSIS THROUGH NON-INVASIVE METHODS IN PATIENTS WITH CHRONIC VIRAL HEPATITIS B AND C

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**Introduction:** Biopsy has been considered the method of choice for staging fibrosis in liver disease. However, as it is an invasive method subject to sampling errors and morbidity, new non-invasive methods have been proposed for the assessment of liver fibrosis.

**Aims:** To evaluate and compare serum fibrosis biomarkers (APRI and FIB4) with transient liver elastography (THE), gold standard in this study in patients with chronic viral hepatitis B and C.

**Methods:** Cross-sectional study of patients with chronic hepatitis B or C virus undergoing THE. The patients were evaluated using

serum liver fibrosis markers APRI and FIB4. The degree of fibrosis  $\geq 2$  of the Metavir classification was defined as significant fibrosis. The diagnostic performance of both methods was calculated and compared using the ROC curve (AUROC).

**Results:** The study included 73 patients, 50 with HBV and 23 with HCV; 50.7% were female, mean age  $48.6 \pm 13.3$  years. Significant fibrosis was observed in 31 patients. The accuracy of serum markers in the diagnosis of liver fibrosis was determined by AUROC, APRI 0.79 and FIB4 0.76 (P = .042); PPV and NPV APRI 91.7% and 76.9% respectively; FIB4, PPV = 87.5% and NPV = 77.8%.

**Conclusion:** The study demonstrated that there was no difference in diagnostic performance between the APRI and FIB4 methods, which were considered tests with good accuracy in the diagnosis of significant fibrosis in patients with chronic viral hepatitis.

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### P-33 EVALUATION OF CIRCULATING METABOLOME IN THE SEARCH OF POTENTIAL DRUG-INDUCED LIVER INJURY BIOMARKERS

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**Introduction:** Idiosyncratic drug-induced liver injury (DILI) is a complex hepatic condition whose diagnosis is challenging due to lack of specific biomarkers.

**Objectives:** We aimed to evaluate serum metabolomic differences between patients with DILI and with other causes of liver injury in search for specific DILI biomarkers.

**Methods:** Metabolomic profiles of serum samples from 26 Spanish DILI patients, 34 with non-DILI acute liver injury (ALI) and 48 healthy controls, were analyzed using UHPLC-MS. To assess changes in disease progression, DILI and ALI patients were followed-up from detection (visit 1), one week (visit 2) and >30 days (visit 3). Data were analyzed using Shapiro-Wilk, Student's t and Wilcoxon tests.

**Results:** Several amino acids, fatty acids (FAs), LPI and bile acids were increased, whereas the glycerophospholipids MEPE and MAPC

were decreased ( $p < 0.05$ ) when DILI was compared to control (visits 1&2). More metabolites were altered when ALI was compared to controls, with higher levels of FAs and lower levels of MEPE and MEPC. Both DILI and ALI showed fewer differences at visit 3 compared to controls, although several FAs remained increased. The differences found were more limited when ALI vs DILI were compared. However, at visit 1 ALI showed a significant higher increase in the bile acids and 31 FAs than DILI patients, but with lower levels of MEPE, tryptophan and alanine. Remarkably, the amino acids Phe-Phe, taurine, glutamic acid and lysine were significantly increased in DILI patients as compared to controls ( $p < 0.05$ ) but did not differ between ALI and controls ( $p > 0.05$ ).

**Conclusion:** Most metabolomic differences are found at times closer to DILI recognition (visits 1&2), although abnormal values of FAs remain during recovery. Some FAs species and the amino acids taurine, Phe-Phe glutamic acid, lysine, tryptophan and alanine seem promising DILI biomarker candidates that should be further explored. Funding: CIBERehd, ISCIII-FEDER P118/00901, P119/00883.

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### P-34 OUTCOME OF HEPATITIS C TREATMENT WITH DIRECT-ACTING ANTIVIRALS AFTER UNIVERSAL ACCESS TO THERAPY

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**Introduction:** In our community up to 2016, treatment with direct-acting antivirals was limited to patients with advanced fibrosis, and from January 2017, treatment was allowed to all patients, regardless of their fibrosis stage.

**Objectives:** To assess changes in the profile of patients treated, and their impact on th outcome.

**Methods:** We collected clinical information, virological characteristics, type of therapy and Sustained Virological Response from patients treated between 2014-2016 (prioritised treatment) and 2017-June 2020 (universal access).

**Results:** We treated 1148 patients until June 2020, 361 between 2014-2016 and 787 between 2017-June 2020. In both periods, the majority were male (although we see an increase in women in 2nd period, 35 vs 43%). The percentage of patients with fibrosis 3-4 was clearly higher in the first period (88.8), as expected due to the prioritisation policy, but in the 2nd period it still represents 30.6% of patients. Of these, 63.2 and 20.4% of patients had cirrhosis. We treated few patients with decompensated cirrhosis, most of them in the first period (10 vs. 2). Genotype 1, mainly 1b, was the most prevalent in both periods. Regarding treatment, 28.8% of patients in the first period had received some previous treatment (vs 7.8% in the 2nd period). In the first period ribavirin was routinely used (67.6% vs 11.7%), pan-genotypic treatments were used in only 14.1% of patients (vs. 75.2%) and treatments were longer (8 weeks: 0 vs. 44.7%, 12 weeks: 66.5 vs. 52.2%, 24 weeks: 32.7 vs. 2.7%). SVR rate was slightly superior in the second period (99.1 vs 96.1%).

**Conclusions:** Despite having prioritised the treatment of patients with advanced fibrosis, these patients still represent one third of those subsequently treated. This should make us persevere in our efforts to identify patients with Hepatitis C. On the other hand, the advent of new, shorter duration pan-genotypic treatments has greatly simplified treatment and improved SVR rates.

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### P-35 NONINVASIVE PREDICTORS OF ESOPHAGEAL VARICES IN PATIENTS WITH HEPATOSPLENIC SCHISTOSOMIASIS MANSONI: MULTICENTER STUDY

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**Background:** No previous study have evaluated transient elastography (TE) for predicting esophageal varices (EV) in hepatosplenic schistosomiasis (HSS).

**Aim:** To investigate noninvasive methods of predicting EV in patients with HSS mansoni.

**Methods:** Cross-sectional multicentric study included 51 patients with HSS. Patients underwent ultrasonography-dopplerfluxometry, upper endoscopy, complete blood cell count and TE (Fibroscan®) for liver and spleen stiffness measurement (LSM and SSM). Noninvasive scores previously established for cirrhotic population were studied: platelet count to spleen diameter ratio (PSR), LSM-spleen diameter to platelet ratio score (LSPS) and varices risk score (VRS). We proposed a version of LSPS and VRS by replacing LSM with SSM and named them SSPS and modified-VRS, respectively.

**Results:** EV was detected in 42 (82.4%) subjects. Individuals with EV presented higher SSM (73.5 vs 36.3 Kpa,  $p = 0.001$ ), splenic vein diameter (10.8 vs 8.0 mm,  $p = 0.017$ ), SSPS (18.7 vs 6.7,  $p = 0.003$ ) and modified-VRS (4.0 vs 1.4,  $p = 0.013$ ), besides lower PSR (332 vs 542,  $p = 0.038$ ), than those without EV. SSPS was independently associated with EV presence (OR=1.19, 95%CI 1.03-1.37,  $p = 0.020$ ) after multivariate analysis. In a model excluding noninvasive scores, SSM was independently associated with EV diagnosis (OR=1.09, 95%CI 1.03-1.16,  $p = 0.004$ ). AUROC was 0.856 (95%CI 0.752-0.961,  $p = 0.001$ ) for SSM and 0.816 (95%CI 0.699-0.932,  $p = 0.003$ ) for SSPS ( $p = 0.551$ ).

**Conclusions:** Spleen-related variables were predictors of EV: SSM, splenic vein diameter, SSPS, modified-VRS and PSR. Multivariate models indicated that SSM and SSPS are useful tools for predicting EV in non-cirrhotic portal hypertension by HSS and may be used in clinical practice.

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### P-36 ACCURACY OF PROGNOSTIC SCORES IN PREDICTION OF MORTALITY IN CIRRHOTIC PATIENTS ADMITTED TO THE INTENSIVE CARE UNIT

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