Material and methods: The IC50 of the METD in the LX-2 cells was evaluated by the MTT assay. LX-2 cells were exposed to METD (100-200 ng/mL) with TGF-β (10 ng/mL) at 24, 48 and 72 h. RNA and proteins were extracted, RT-PCR, qPCR and WB were performed, the relative expression of tumor growth factor beta (TGF-β), collagen 1α 1 (COL1α-1), smooth muscle alpha actin (α-SMA), inhibitor of metalloproteinase 1 (TIMP1), metalloproteinase 2 (MMP2), SNAIL1 an EMT marker and mitofusin 2 (MNF2) of mitochondrial function. Endogenous β-actin gene and GAPDH. ANOVA analysis ($p < 0.05$).

Results: The METD has a concentration of 150 ng/mL mantain over 80% viability in LX-2 cells. The presence of METD in cells treated with TGF-β modifies fibrogenic markers, decreasing COL1α-1 and increasing α-SMA RNA expression at all times, but increase the translational expression of α-SMA at 48 and 72 h. We find TIMP1 and MMP2 RNA overexpression, and decreased TIMP1 translational expression was found at all times. It was found Snail1 and MFN2 RNA overexpression, controversially found decreased the translation of MNF2 at all times.

Conclusions: The METD modulates the expression of profibrogenic markers, ECM modulators and some pathways related to EMT and mitochondrial morphology and function, attenuating the expression of profibrogen markers in human LX-2 stellar cells. This work was partially subsidized by PAICYT SA669-18. Registration number of the ethics committee HI11-003.

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Prevalence of spontaneous bacterial peritonitis in patients with hepatic cirrhosis in the military central hospital

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Background and aim: Spontaneous bacterial peritonitis (SBP) is one of the main complications of cirrhotic patients with ascites and is of great importance due to the high mortality rate and even in asymptomatic patients, a high prevalence of SBP has been documented. The objective of the present study was: To calculate the prevalence of SBP in decompensated cirrhotic patients who were hospitalized in the HCM, as well as to identify which is the main agent that appears in the SBP.

Material and methods: A retrospective study was performed in cirrhotic patients with SBP who were hospitalized in the Gastroenterology Section of the Central Military Hospital from the period of January 2017 to January 2018. Patients with CH with data on SBP were included, those patients with HCC were excluded, secondary or cirrhotic peritonitis with tumor-caused peritoneal carcinomatosis.

Results: A review of the records was carried out and there were 134 patients, 68 (50.7%) male, with an average age of 56.42 ± 15.27 years, the etiology of cirrhosis had alcoholic cirrhosis with 80 (40%), autoimmune etiology 72 (36%) patients, CBP 12 (6%), cirrhosis due to NASH 12 (6%), cirrhosis due to HBV 16 (8%) and cirrhosis due to HCV 8 (4%). According to the reports of the cultures and antibiograms, there was a higher frequency of E. Coli 84 (42%) and a lower frequency of S. aureus 15 (8%) (See Table 1). AKI type SHR was diagnosed in 188 (94%) of patients.

Conclusions: The most common etiology found was E. Coli ESBL with sensitivity to carbapenems (Meropenem), so in our hospital, the use of this type of antibiotics should be considered as first-line treatment to avoid progression to RHS and thus decrease the day of hospital stay and recurrence of hospitalization for SBP

Conflicts of interest: The authors have no conflicts of interest to declare.

Ascites fluid culture report and antibiogram	
Enterococcus sp	Ceftriaxona
Escherichia coli BLEE	Meropenem
Klebsiella pneumoniae	Piperacilina-Tazobactam
Staphylococcus aureus	Ceftriaxona

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Comparison of two ROC curve-based methods for determining the cross-point critting frequency in the diagnosis of EHM

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Background and aim: Minimal hepatic encephalopathy (MHE) is characterized by time of reaction, executive function, as well as high disability and mortality. There is an absence of a Gold Standard for its prognosis; the application of psychometric tests combined with neurophysiological tests to identify the presence of MHE is worldwide accepted. Critical flicker frequency (CFF)test is commonly used; however, there exist discrepancies with respect to the determination of the cutoff value.

Material and methods: While analyzing CFF's continuous scale, the application of Logistic Regression Analysis proved to be suitable to define the appropriate cutoff point. A set of 59 patients with hepatic cirrhosis were studied. The ROC curve showed ambiguities in the determination of the cutoff point when using "Youden's index" as well as the closest point on the graph to the upper left

corner point. It was decided to apply Regression Analysis, Algebra, Analytic Geometry and Differential Calculus to determine the cutoff point. MINITAB software was used for computations.

Results: Regression allowed two different ways to reach the same conclusion: CFF's cutoff point is 38.0 Hz to identify patients with MHE. CFF test is a promising tool but to be of help, it needs a valid cutoff point in the scale.

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Impact of liver enzymes on SARSCoV-2 infection and on the severity of clinical disease

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Background and aim: SARSCov-2 infection, currently responsible virus for the pandemic, can have a multi-organic impact, recent studies show that liver injury could be a manifestation of the disease, and liver disease could also be related to a worst prognosis. AIM**:** To compare the characteristics of patients with severe COVID-19 due to SARSCov-2 disease requiring intubation versus stable patients.

Methods. Type of study: Observational, a case-control, nested in a cohort study. Procedure: Complete medical records of patients admitted for COVID-19 at a third level center were reviewed. Clinical and biochemical data were collected and then characteristics between seriously ill patients who required intubation were compared versus stable patients without mechanical ventilation.

Results: We included 166 patients with COVID-19 due to SARSCov-2 infection, 114(68.7%) were men, mean age was 50.6 ± 13.3 years old, 27(16.3%) were assessed as seriously ill patients requiring intubation for SARS. The comparative analysis between those who required intubation versus those who remained without requiring intubation showed significant elevation of ALT, AST, LDH and D-dimer, also older age, see Table.

Conclusions: This is the first study in a Mexican cohort, which demonstrate that

seriously ill patients have significant raises of liver enzymes (AST, ALT) with prognostic implications in the SARSCov-2 disease course.

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Table
which compares characteristics between patients who developed SARS and required intubation, versus those with COVID-19 pneumonia without severity criteria for intubation.

Variable	SARS requiring intubation *n* = 27	COVID-19 pneumonia without severity criteria and without mechanical ventilation *n* = 139	*P* (*<0.01)
Male gender, n(%)	20 (74.1)	94 (67.6)	0.51
Albumin, g/dL	3.27 ± 0.52	3.48 ± 0.50	0.09
ALT, UI/L	225.4 ± 341.2	41.3 ± 41.1	0.003*
AST, UI/L	325.3 ± 382.4	52.8 ± 47.1	0.001*
Alkaline Phosphatase, UI/L	109.1 ± 74.8	96.8 ± 54.4	0.39
GGT, UI/L	205.6 ± 360.4	125.4 ± 163.3	0.35
Age, years-old	58.6 ± 12.7	49.1 ± 12.8	0.001*
Glucose, mg/dL	168.2 ± 95.0	149.8 ± 97.8	0.54
Urea, mg/dL	54.7 ± 37.0	42.1 ± 37.7	0.14
Creatinine, mg/dL	1.1 ± 0.7	0.9 ± 0.7	0.29
Cholesterol, mg/dL	102.9 ± 33.8	123.0 ± 27.0	0.03
Triglycerids, mg/dL	142.4 ± 45.8	145.7 ± 49.4	0.83
Direct Bilirubin, mg/dL	0.8 ± 1.7	0.3 ± 0.3	0.23
Indirect Bilirubin, mg/dL	0.8 ± 1.1	0.5 ± 0.3	0.31
Total proteins, g/dL	6.5 ± 0.7	6.3 ± 1.0	0.60
LDH, UI/L	764.6 ± 401.9	461.0 ± 185.6	0.001*
Sodium, mEq/L	128.8 ± ± 26.8	135.8 ± 3.5	0.38
Potasium, mEq/L	4.2 ± 0.4	4.0 ± 0.5	0.19
Chlorine, mEq/L	102.2 ± 5.04	100.6 ± 4.35	0.25
Calcium, mg/dL	7.8 ± 0.47	8.0 ± 0.44	0.77
Phosphorus, mg/dL	3.2 ± 1.0	3.1 ± 0.8	0.75
Magnesium, mg/dL	2.3 ± 0.3	2.2 ± 0.4	0.27
Leukocytes, cel/mm^3	10.3 ± 5.1	8.7 ± 4.5	0.23
Neutrophils, cel/mm^3	8.9 ± 4.6	7.1 ± 4.2	0.09
Limphocytes, cel/mm^3	1.0 ± 0.4	1.0 ± 0.6	0.99
Hemoglobin, g/dL	14.7 ± 1.7	14.5 ± 2.3	0.82
Red cells Wide Distribution	14.8 ± 1.4	14.2 ± 1.4	0.15
Platelets, cel/mcL	219.7 ± 73.1	226.4 ± 86.2	0.77
Mean Platelet Volume, fL	8.9 ± 0.9	8.4 ± 0.9	0.11
Fibrinógeno, mg/dL	640.7 ± 207.5	608.6 ± 168.9	0.54
D Dimer, ng/mL	7765 ± 9109	1871 ± 4146	0.003*
Reactive C Protein, mg/L	210.3 ± 157.4	142.7 ± 121.2	0.17
Ferritin, ng/mL	782 ± 518	786 ± 1011	0.98
CPK, UI/L	169 ± 188	300 ± 462	0.36
CPK-MB, ng/dL	34 ± 42	25 ± 17	0.29
Troponine I, ng/L	49.4 ± 136.7	26.1 ± 96.3	0.45
Mioglobin, ng/mL	151 ± 151	110 ± 192	0.47
Brain Natriuretic Peptid, pg/mL	56.9 ± 80.5	136.1 ± 342.2	0.49