

cirrhosis, being the main gastrointestinal bleeding, in addition to presenting a larger diameter of the portal vein on ultrasound and a higher percentage of large esophageal varices. And we observed this group of patients presented difficult management of glucose levels being treated with combinations of insulin and metformin.

The authors declare that there is no conflict of interest.

<https://doi.org/10.1016/j.aohep.2021.100599>

COMPLICATION ASSOCIATED WITH UPPER GASTROINTESTINAL BLEEDING AMONG MEXICAN PATIENTS WITH CIRRHOSIS

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Introduction and Objectives: Upper gastrointestinal bleeding is a common complication among cirrhotic patients and holds high mortality and morbidity; the most common cause is variceal hemorrhage. Nonetheless, non-variceal hemorrhage is also frequent; this study aims to determine the prevalence of upper gastrointestinal bleeding complications among Mexican patients with cirrhosis.

Methods: Retrospective, cross-sectional, an analytic study among patients with cirrhosis of all etiologies admitted to the Gastroenterology department of the Hospital General de Mexico "Dr. Eduardo Liceaga" with acute upper gastrointestinal bleeding of both etiologies (variceal and non-variceal hemorrhage) in the period comprised from January 2017 to May 2021. Complications associated with the bleeding events were evaluated. For statistical analysis, quantitative variables were described as mean and standard deviation for qualitative variables in frequencies and percentages.

Results: A total of 295 patients were included, 55.3% male, mean age was 54.6 ± 11.8 years, 16.27% patients were staged as Child A, 49.15% Child B y 34.57% Child C, with and an average MELD score of 16. Main cirrhosis etiology was alcohol-related liver disease in 39.7%, viral hepatitis 6.4%, NASH 5.8% and others 3.4%; however, in 44.7% of patients, we were not able to determine the etiology of liver disease. The main cause of gastrointestinal bleeding was variceal hemorrhage in 71.1% and 28.9% non-variceal. The shock was identified in 5.76% (17) of patients, 9 of them required vasopressors, hepatic encephalopathy was present in 42.71% (126), Ascites in 18.64% (55), jaundice in 16.94% (50), acute kidney injury in 31.52% (93), bacterial infections in 24.06% (71), four patients (1.35%) died. Complications related to gastrointestinal bleed according to disease severity are depicted in table 1.

Discussion and Conclusions: Complications associated with upper gastrointestinal bleeding among Mexican patients with cirrhosis are frequent. Encephalopathy is the most common (42.71%) followed by acute kidney injury (31.52%) preponderantly of high grade, patients with more advanced disease are more prone to present infections, mainly UTI and ascites. Therefore they must be monitored closely.

The authors declare that there is no conflict of interest.

COMPLICATION	CHILD A (N=48)	CHILD B (N=145)	CHILD C (N=102)
SHOCK %(N)	2.08% (1)	6.89% (10)	5.88% (6)
ENCEPHALOPATHY %(N)	20.8% (10)	34.44% (50)	64.7% (66)
ASCITES %(N)	8.3% (4)	16.55% (24)	26.47% (27)

(continued)

(Continued)

COMPLICATION	CHILD A (N=48)	CHILD B (N=145)	CHILD C (N=102)
JAUNDICE %(N)	0% (0)	7.58% (11)	38.23% (39)
ACUTE KIDNEY INJURY %(N)	2.08% (1)	28.90% (42)	49.01% (50)
Grade 1a	0	0	0
Grade 1b	0	54.76% (23)	44% (22)
Grade 2	100% (1)	21.42% (9)	26% (13)
Grade 3	0	23.8% (10)	30% (15)
INFECTIONS %(N)	6.25% (3)	20% (29)	38.23% (39)
SBP	0	0	12.82% (5)
UTI	100% (3)	55.17% (16)	56.41% (22)
Pneumonia	0	17.24% (5)	23.07% (9)
Others	0	6.8% (2)	17.94% (7)
MORTALITY %(N)	0	2.06% (3)	0.98% (1)

<https://doi.org/10.1016/j.aohep.2021.100600>

TRENDS OF CHRONIC LIVER DISEASES IN THE UNIVERSITY HOSPITAL, UANL FOR 25 YEARS. A SINGLE-CENTER EXPERIENCE

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Introduction and objectives: Liver cirrhosis is one of the main leading causes of death in Mexico. Some chronic liver diseases (CLD) are Alcoholic Liver Disease (ALD), Autoimmune Liver Disease (AILD), Hepatitis B (HBV), Hepatitis C (HCV), and Non-Alcoholic Steatohepatitis (NASH). In Mexico, ALD and HCV are the leading causes of CLD. Objective: To analyze the incidence of CLD in a liver unit (LU) over 25 years.

Methods and materials: Clinical records of patients who attended for the first time to LU, from January 1995 to December 2019 were reviewed. There were 2780 patients with CLD, and 2668 filled the inclusion criteria with available clinical records. The diagnosis of CLD was made according to international guidelines. Inclusion criteria: patients with CLD in their first visit, with or without cirrhosis. Exclusion criteria: acute liver disease, <18 years old. Patients were divided by etiology. This study was observational, descriptive and the sampling was carried out in a non-probabilistic and convenient way. Intervals of time were group A (G^A) 1995-2003, group B (G^B) 2004-2011 and group C (G^C) 2012-2019. A one-way ANOVA was used to determine the differences between these groups.

Results: A statistically significant difference was found in the AILD, ALD and NASH groups, as determined by a one-way ANOVA ($p=0.036$, $p=0.011$ and $p<0.00$). A Tukey post hoc test showed that AILD cases in GB were higher than GA ($p=0.029$). The same trend was observed in ALD cases, which also showed an increase between the GA and GC ($p=0.012$). For NASH cases, each period showed an increase ($p=0.005AB$, $p<0.001AC$, $p=0.013BC$). HCV and HBV showed no statistically significant changes (Figure).

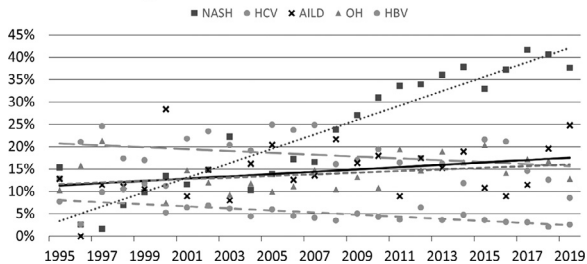
Discussion: In Mexico, there is scarce information on the incidence of CLD. This study showed a higher NASH incidence (43%) than the previously reported (29%)¹ as well as prevalence (23%)² in cirrhotic patients. The incidence of HAI in this study was 17%, similar to a previous study of 16%¹ in cirrhotic. Previously reported prevalence was 7.3%² in cirrhotic patients. ALD incidence was 15%, previously reported in 23%¹, and a prevalence of 31%² in cirrhotic patients. HCV

incidence had no significant changes (16%), but it was lower than previously reported (22%)¹.

Conclusions: This is the first study that reports an incidence of CLD in patients with or without cirrhosis. In the northeast of the country, the incidence of NASH has increased significantly during the last 25 years, becoming the most common CLD. This study found an AILD incidence similar to a previous report.¹ ALD showed moderate elevation compared to NASH, and HCV began to decrease.

The authors declare that there is no conflict of interest.

Figure. Incidence of chronic liver diseases



<https://doi.org/10.1016/j.aohep.2021.100601>

CAUSES OF DECOMPENSATION IN HOSPITALIZED CIRRHOTIC PATIENTS

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Introduction and Objectives: Decompensation of liver cirrhosis represents a turning point in the prognosis of cirrhotic patients presenting more complex medical needs that can lead to a prolonged hospital stay and a significant risk of in-hospital death. Likewise, mean survival decreases from 12 years for compensated cirrhosis to almost two years for decompensated cirrhosis. Apica BS et al. (2013) reported ascites as the most frequent cause of decompensation in 95.3% cases in the African population. On the other hand, the Colombian study of Sanchez (2016) conducted with the Latin population indicates as the leading cause of decompensation ascites (36.1%), variceal bleeding (28.4%). Unfortunately, in Mexico, we do not have data indicating the most frequent cause of decompensation in hospitalized patients. Therefore, knowing the frequency and most common causes of decompensation will direct prevention and timely treatment strategies. Objective: To determine the cause and prevalence of liver cirrhosis decompensation in patients admitted to the Hospital General de México.

Material and Methods: Observational, descriptive, retrospective study, Inpatients, hospitalized in the Gastroenterology Service of the General Hospital of Mexico "Dr. Eduardo Liceaga" with a diagnosis of liver cirrhosis, during the period from March 2019 to March 2021. The results were analyzed by descriptive statistics, frequency measures, and measures of central tendency (to obtain percentages, mean and average).

Results: We reviewed 454 records of patients diagnosed with liver cirrhosis with an average age of 59 years with a range of 18-75 years, predominantly male 59.25%. The most frequent etiology was alcohol in 44.71%, followed by non-alcoholic steatohepatitis 9.91%, autoimmune causes 7%, and viral (hepatitis B and C) 3.30%;

however, up to 31.7% the etiology cannot be determined. According to the Child-Pugh classification, the predominant one was C up to 53.96%. The most frequent decompensation was gastrointestinal bleeding with 52.64%, of which 47.57% were of variceal origin, acute kidney injury with 50%, hepatic encephalopathy 46.03%, and ascites 40.96%. It should be noted that 15.19% presented acute on chronic hepatic failure, and 11.23% toxic-alcoholic hepatitis: less frequently hyponatremia 8.37%, spontaneous bacterial peritonitis (SBP) 7.92%, hepatorenal syndrome 1.98%, and hepatopulmonary syndrome 1.10%. See table 1.

Conclusions: In this study, the most frequent cause of decompensation was variceal bleeding, which differs from that reported in the literature in previous studies; however, this may be because the study population attends assessment in advanced stages of the disease and sometimes in the terminal phase to receive specialized care.

The authors declare that there is no conflict of interest.

Table 1

Anthropometric characteristics, Child-Pugh, etiology, and decompensations of Chronic Liver Disease.

PARAMETER	n= 454	interval or %
Average age (years)	59	18-75
GENDER		
Male	269	59.25%
female	184	49.75%
CHILD PUGH		
A	42	9.25%
B	167	36.78%
C	245	53.96%
ETIOLOGY		
ALCOHOL	203	44.71%
UNAFFILIATED	143	31.50%
NASH	45	9.91%
PRIMARY BILIARY CHOLANGITIS	23	5.07%
C VIRUS	14	3.08%
AUTOIMMUNE HEPATITIS	8	1.76%
CARDIAC	7	1.54%
HEPATOCARCINOMA	5	1.10%
BILIARY TRACT LESION	3	0.66%
BILIARY TRACT ATRESIA	1	0.22%
PRIMARY SCLEROSING CHOLANGITIS	1	0.22%
B VIRUS	1	0.22%
DECOMPENSATIONS		
GASTROINTESTINAL HEMORRHAGE	239	52.64%
VARICEAL	216	47.57%
NON - VARICEAL	16	3.52%
VARICEAL/NON VARICEAL	7	1.54%
HEPATIC ENCEPHALOPATHY	209	46.03%
I	0	0%
II	158	34.80%
III	51	11.23%
IV	0	0%
ACUTE KIDNEY INJURY	225	50%
IA	80	17.62%
IB	14	3%
II	60	13.21%
III	55	12.11%
CKD	16	3.52%
ASCITES	186	40.96%
GI	4	0.88%
GII	115	25.33%
GIII	67	14.75%
SBP	36	7.92%
HYPONATREMIA		
<125	38	8.37%
ACLF		
1	69	15.19%
2	21	4.62%
3	34	7.48%
4	14	3%
HEPATORENAL SYNDROME	9	1.98%
HEPATOPULMONARY SYNDROME	5	1.10%
TOXIC ALCOHOLIC HEPATITIS	51	11.23%

<https://doi.org/10.1016/j.aohep.2021.100602>