PORTA VEIN THROMBOSIS (PVT) IN CIRRHOTIC PATIENTS PRE AND DURING THE PANDEMIC BY SARS-COV2

C.A. Campoverde-Espinoza, A. Martínez-Tovar, M.F. Higuera de la Tijera

General Hospital of México Dr. Eduardo Liceaga. México City, México

Introduction: Determining the incidence and prevalence of PVT is difficult due to the heterogeneity of risk factors. The prevalence in cirrhotics is 1% in compensated patients and 8-25% in decompensated patients. SARS-COV2 infection presents extrapulmonary manifestations such as coagulation disorders with thrombotic angiopathy in 20-43%. In histopathological reports of necropsies or liver biopsies of patients who died from SARS-COV2, 30% had hepatic vascular thrombosis without chronic liver disease. IAM: To determine the prevalence of PVT in patients admitted to Gastroenterology before and during the SARS-COV2 pandemic.

Material and Methods: Research design: Descriptive, cross-sectional/prevalence. Procedure: We review medical records of all cirrhotic patients from March 2019 to February 2020 and from March 2020 to February 2021. We include cirrhotic patients diagnosed with PVT. Qualitative variables were expressed as frequencies and percentages. The numerical variables were expressed as means and standard deviations.

Results: In the pre-pandemic period: 491 cirrhotics admitted from March 2019 to February 2020 were identified, finding 24 cirrhotics with PVT (4.89%) 15(62.5%) were women with a mean age of 58.13 13.51 years. 6(25.0%) with neoplasms, of the latter 6(100.0%) with hepatocellular carcinoma. Regarding Child-Pugh: 11(45.8%) were B and 13(54.2%) were C and a mean MELD of 21.58. Regarding the location of the thrombus: 14(58.3%) occurred in the portal trunk, 6 (25.0%) in the trunk and branches, and 4(16.7%) only in one branch. During the pandemic period, we identified 189 cirrhotic patients; 24(12.60%) were cirrhotic with PVT. Of the latter, 12(50%) were men, with a mean age of 60.6311.93, 3(12.5%) had neoplasia and of these, 2(8.3%) were hepatocellular carcinoma. According to the Child-Pugh: 1(4.2%) was A, 12(50%) was B and 11(45.8%) was C with a mean MELD of 23.08, 15 (62.5%) had acute kidney injury, 4(16%) had atypical pneumonia upon admission, 16(66.7%) had ascites, of these 10(41.7%) were grade II. According to laboratory tests: creatinine 6.48±19.53, uric acid 9.22± 3.58, albumin 2.53±0.55, INR 1.81±1.07, and DHL 217.37±83.77. 95.8% underwent USG and 41.7% angiotomography. Regarding the thrombosis characteristics, 50% were acute, 29.2% had cavernomatosis, 66.7% were located in the portal trunk, and 54.2% had total occlusion. Regarding treatment, only 5(20.8%) received enoxaparin.

Discussion: Patients with COVID-19 experience a state of hypercoagulability, either in the arterial and/or venous system. Currently, only one case report has described a patient with suspected COVID-19, but without RT-PCR confirmation for SARS-COV2 and who developed PVT during hospitalization. On the other hand, patients with advanced liver disease are at higher risk of developing PVT. In the present study, there is no confirmatory evidence of infection by SARS-COV2. Still, there is evidence of an increase in the number of PVT cases three times more during the pandemic, so it is inferred that PVT could be associated with the presence of this infection.

Conclusions: We found that during the pandemic an increase in PVT was evidenced in patients with less advanced liver disease and fewer comorbidities, but with a more severe clinical picture, so it is suggested to investigate the presence SARS-COV2 in patients with liver decompensation and suspected of the PVT.

The authors declare that there is no conflict of interest.

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HEPATIC FUNCTION ALTERATIONS IN SARS-COV 2 HOSPITALIZED PATIENTS AT HOSPITAL 450, DURANGO

J.S. Jacobo Karam, M.A. Vazquez-Garcia, C.G. Lerma-Burciaga, M.E. Rábago-Sánchez, G. Valencia-Pérez, H.A. Almonte de León, A.G. Calvillo-Carrillo, L.E. Zavala-Fernández, O. López-Gómez

Hospital General 450, Hospital General de Durango, Durango México

Introduction and Aim: Even if Sars-Cov 2 is an emergent, primarily respiratory illness, hepatic function alterations has been described by different countries. This work aims to describe the hepatic function alterations of patients with COVID-19 and their association with comorbilities and mortality.

Material and Methods: We conducted an observational, retrospective, cross-sectional, descriptive study, using files from patients Sars-COv 2 positive PCR test admitted at Hospital 450 between March 13th through October 31st 2020, including that patients with liver function test. Sociodemographic data, symptoms, hospitalization area, outcome and laboratory results were registered. In addition, a descriptive analysis, X2 test and OR risk association were performed.

Results: 466 patients were admitted at the hospital in this period of time, 69 patients without liver function test were excluded. A total of 397 patients were included: 60.2% were men, and 39.8% female. The mean age was 57 years old (16-95). 95.5% were communitary cases. Mean evolution days were 7.4 (1-37), and mean hospitalization days 8.6 (1-65). The symptoms related were: dyspnea (93.5%), cough (73%), fever (71%), myalgia (69.5%), headache (56.4%), odynophagia (27.7%), diarrhea(9.3%) and vomit (6%). Intubation were necessary in 27.2%, 28.8% had sepsis, and 15.1% were in shock status. The more frequent comorbidities were: hypertension (53%), DM (40.8%), obesity (43.1%), renal illness (14.1%) and other liver disease (3%). 33% of the patients were admitted to the intensive care unit. 63.7% demonstrated aminotransferase alterations (38% both AMT), most frequently AST (253 patients with twice normal values), hypoalbuminemia (64.7%), Alkaline Phosphatase (29.2%), and Total Bilirubin increased values (21.4%). In 61.2% of the patients anemia were detected, lymphopenia (55.4%), thrombocytopenia (17.9%), increased D dimer (79.8%), increased PCR (72.3 %). 41.1% of the patients died. Mortality association was found with: hypoalbuminemia (0.049) OR=1.548 IC95% (1.0-2.395); shock state (0.000) OR=13.995 IC95% (6.4-30.43); sepsis (0.000) OR=10.56 IC95% (6.2-17.72), intubation (0.000) OR=13.995 IC95% (12.5-45.0), renal illness (0.000) OR=5.45 IC95% (2.86-10.38), hypertension (0.000) OR=1.7 IC95% (1.13-2.55), and cardiovascular disease (0.01) OR=2.45 IC95% (1.21-4.95). No association between AMT and mortality was found.

Discussion: An elevated percentage of AMT anomalies was found, as in other works, almost one third of the patients presented with elevated AP, instead of 1.8% reported in other studies. A bad prognosis was associated with hypoalbuminemia.

Conclusions: Two thirds of the patients presented hypoalbuminemia and AMT increased, and in a few percentages with BT and AP anomalies. Hypoalbuminemia increases mortality risk.

The authors declare that there is no conflict of interest.

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