Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
Background: Liver transplantation (LT) is the treatment of choice for unresectable early hepatocellular carcinoma (HCC). Previous studies demonstrated that Alpha-fetoprotein (AFP) is an important biomarker of prognosis and tumor recurrence.

Aims: The aim of our study was to analyze the role of AFP in the post-transplant outcomes of HCC patients undergoing LT.

Methods: We conducted a multicenter, retrospective cohort study, analyzing medical records of 1,119 liver transplant recipients with HCC in Brazil. Survival curves were presented using the Kaplan-Meier and compared using the log-rank test. Univariate and multivariate regression analysis was fitted. We performed an evaluation of the effect of the continuous variable on the risk ratio, to determine the best "cutoff point" of AFP level at HCC diagnosis and pre-transplantation to stratify the risk of recurrence and survival.

Results: Among 1,119 cases, 81% of patients were male, with a mean age at transplantation of 58 years. At HCC diagnosis, 85% were within Milan Criteria (MC). Median pre-LT AFP was 9.7 ng/ml (0-40,800 ng/ml) and 51% of patients had pre-LT AFP ≤ 10 ng/ml. The overall survival was 63% in 5 years and post-LT HCC recurrence was observed in 8% of patients. We found AFP > 400 ng/ml at HCC diagnosis and AFP pre-LT > 200 ng/ml as the better "cutoff points" for both overall survival and recurrence risk. Patients with AFP pre-LT ≤ 200 ng/ml had a better overall survival and recurrence-free survival compared with patients with AFP > 200 ng/ml, respectively, 76% and 92% versus 67% and 66% in 5-years (p < 0.001). Pre-LT AFP >200 ng/ml and being outside MC at diagnosis were also independent risk factors for post-LT HCC recurrence and poor survival in multivariate analysis.

Conclusions: Our study demonstrated role of AFP as a main pre-transplant prognostic factor, both to predict post-LT tumor recurrence and survival.

https://doi.org/10.1016/j.aohep.2021.100472

P-113 COVID 19 AND CIRRHOSIS, A DEADLY COMBINATION. WHAT HAPPENS IN ECUADOR?

Manuel Guaranda¹, Maizury Garzón², Rubén Munoz², Diana Carbonell¹, Marcela Mahecha¹

Introduction: COVID-19 represents a great threat in patients with cirrhosis, being a poor prognostic factor. Since the first COVID 19 case in Ecuador 02/29/2020, its impact on cirrhetics in this country is unknown.

Aim: To determine the morbidity and mortality of cirrhotic patients with COVID 19. Is it higher in relation to cirrhetics without COVID 19?

Methods: The present study was multicenter, observational, analytical, prospective and cross-sectional, included 147 hospitalized patients from 2 health units in Guayaquil-Ecuador (Hospital General HOSNAG and Hospital "Abel Gilbert PONTÓN"), from February 29, 2020 to February 28, 2021. Two groups were established: A. cirrhotic patients with COVID 19; group B, cirrhotic without COVID 19, the following tests were used: Student’s T, U Mann-Whitney continuous variables and chi-square, Fisher’s exact categorical variables; Statistical analysis was performed with SPSS version 21.

Results: Of the 147 included, Group A led by male sex 40 patients (52.6%), female sex 36 (47.4%), distribution according to child pugh was 10 (13.6%) stage A, 36 (47.3%) stage B and 30 (39.4%) stage C, causes of admission were: SRI 59 (77.6%), febrile syndrome 15 (19.7%), encephalopathy 2 (2.6%), average days of hospitalization 13 (± 6.4), associated mortality was 28 (36.8%) most frequent causes of death; SRI 19 (25%), ACLF 8 (10.5%), AMI 1 (1.3%). Group B, male sex 32 patients (54.5%), female 29 (45.5%), child pugh A only 2 patients (3.2%), stage B 30 (49.1%) and C with 29 (47.5%), reason for admission more frequent was UGB 27 (44.2%), ascerts 22 (36%), encephalopathy 9 (14.7%), febrile syndrome 3 (4.9%), average days hospitalized 11 (± 5), mortality of 27.8%, causes of death; UGB 9 (14.7%), ACLF 5 (8.1%) and encephalopathy 3 (4.9%) (P 0.002).

Conclusion: The morbidity and mortality of cirrhotic patients with Covid 19 was higher than those without Covid 19.

Table 1
Comparison of cirrhotic patients with COVID-19 and cirrhotic patients without COVID-19

| Characteristics | Group A (n=76) | Group B (n=71) | P value |<0.05 |
|----------------|--------------|---------------|---------|------|
| Age | Male | 52 (±10.6) | 54 (±9.2) | 0.988 |
| | Female | 40 (52.6%) | 32 (43.3%) | 1.00 |
| Child Pugh | A | 10 (13.6%) | 3 (2.2%) | 0.923 |
| | B | 36 (47.3%) | 30 (40.9%) | 0.817 |
| | C | 30 (39.4%) | 29 (40.7%) | 0.067 |
| Reason for admission | S.R.I | 59 (77.6%) | 0 (0%) | 0.003 |
| | Febrile syndrome | 15 (19.7%) | 9 (4.6%) | 0.062 |
| | Encephalopathy | 2 (2.6%) | 9 (14.7%) | 0.078 |
| | U.G.B | 1 (1.3%) | 27 (44.2%) | 0.266 |
| | Ascites | 22 (29.5%) | 13 (18.3%) | 0.767 |
| Hospitalization days | Mortality | 13 (±6.4) | 11 (±5) | 0.355 |
| | Death cause | 28 (36.8%) | 17 (27.5%) | 0.002 |

* S.R.I: Severe respiratory insufficiency
** U.G.B: Upper gastrointestinal bleeding
*** A.M.I: Acute myocardial infarction
**** A.C.L.F: Acute-on-chronic liver failure

https://doi.org/10.1016/j.aohep.2021.100473