

EXPERIENCE IN THE USE OF HUMAN ALBUMIN IN COMPLICATIONS OF LIVER CIRRHOSIS AT HOSPITAL JUÁREZ DE MÉXICO

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Introduction and Objectives: Controlled clinical studies have demonstrated the benefits of albumin in decompensated cirrhotic patients with ascites, elevated creatinine, spontaneous bacterial peritonitis, refractory ascites, hepatorenal syndrome and encephalopathy, in whom the use of albumin improves not only patient survival but also expands intravascular volume, improves microcirculation, binding to numerous substances such as bile acids, nitric oxide and cytokines. However, the time of administration and the dose remains controversial.

Objective: To present the experience of the administration of human albumin, the clinical and epidemiological factors associated with the success of the treatment in the different complications of hospitalized patients for decompensated cirrhosis in the Gastroenterology Department at Hospital Juárez de México from January 2019 to January 2021.

Material and methods: A descriptive, retrospective, observational and cross-sectional study of a cohort of patients hospitalized for decompensated liver cirrhosis in the Gastroenterology Department at Hospital Juárez de México. The records of 63 patients who were administered albumin at a dose of 0.7 gr/kg of body weight were reviewed according to the type of complication, reason for admission, in such a way that epidemiological data, values from laboratory studies, cause of prescription and administration results which were analyzed with measures of central tendency and percentages, obtaining Child Pugh and MELD scores.

Results: Of the population studied (N=63); 42.8% were men (n=27) with an average age of 57.7 years, 57.1% were women (n=36) with an average age of 59.42 years. Regarding the etiology of liver disease, the following order was observed: alcohol-related liver disease in 42.8%, MAFLD (metabolic associated fatty liver disease) 42.8%, AIH (autoimmune hepatitis) 4.75%, PBC (primary biliary cirrhosis) 4.75% and HBV (hepatitis B virus) 4.75%. Indications for the use of albumin were spontaneous bacterial peritonitis 53.3%; an acute renal failure that does not respond to fluids, precipitated by: upper gastrointestinal bleeding in 14.2%, urinary tract infection 9.5%, alcoholic hepatitis 9.5%, liver failure due to hepatitis B virus 4%, hepatorenal syndrome 9.5%. 42.8% of the patients in the study cohort had at least one comorbidity. 77.7% of them had type 2 diabetes, 11.1% had type 2 diabetes and arterial hypertension, UC was observed in 11.1% of the population. 4.76% had Child-Pugh score A, 28.57% had Child-Pugh score B and Child Pugh score C 66.66% with an average MELD Na of 25 points. In 94.7% of the cases, effectiveness was observed in the resolution of the complication, 5.3% of the patients, despite the administration of albumin, died of septic shock (secondary to urinary tract infection n=3, SBP n=4 and pneumonia n=1), these patients had Child Pugh C, mean MELD Na 32, and mean serum albumin of 1.8 mg / dl, in contrast to the respondents who had mean serum albumin of 2.62 mg / dl.

Discussion: Unlike what is reported in the literature, we observed that despite the lower doses administered than those recommended in the treatment guidelines, we obtained a 94.7% success rate in treated patients, observing that factors such as serum albumin value, comorbidities, Child Pugh score, MELD-NA and added infectious processes can be determining factors in the results of treatment, which raises the question of: whether the administration of albumin should be individualized according to the clinical characteristics of the patient and not a standardized dose according to their complication.

Conclusions: Serum albumin values, the presence of comorbidities, acute infections, and high Child Pugh and MELD Na scores are independent factors that affect the results of human albumin treatment in decompensated cirrhotic patients.

The authors declare that there is no conflict of interest

<https://doi.org/10.1016/j.aohep.2021.100596>

CHANGES IN CARDIAC FUNCTION IN PATIENTS WITH DECOMPENSATED CHRONIC LIVER FAILURE

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Introduction and Objectives: Cirrhotic cardiomyopathy is cardiac dysfunction, recently recognized as a clinical entity, present in up to 50% of liver cirrhosis in the absence of other heart diseases. Cirrhotic cardiomyopathy is characterized by a decrease in the contractile response of the heart in patients with CH, associated with the presence of an alteration in diastolic relaxation and electrophysiological alterations at rest, all in the absence of known heart disease and regardless of the etiology of liver disease. Hemodynamic and electrophysiological studies have made it possible to document alterations in cardiac behavior in 25 and 40-60% of patients with liver cirrhosis, respectively. **Objective:** Determine the alterations in cardiac function in patients diagnosed with decompensated chronic liver failure.

Material and methods: Descriptive, observational, cross-sectional and prospective study, carried out all the patients with decompensated liver cirrhosis who attended the Central Military Hospital from January 2021 to September 2021 and who underwent a laboratory study, echocardiogram, electrocardiogram, chest X-ray and laboratory studies. The mean, standard deviation and absolute and relative frequencies will be used for the quantitative variables for the statistical calculation. The statistical package SPSS version 20 will be used.

Results: Eleven older patients with a diagnosis of decompensated chronic liver failure were included. A new study carried out on the same basis as CANONIC, allowed to clarify the dynamic and evolutionary character of patients with ACLF, determining the average mortality at 28 and 90 days, according to the number of compromised organs. Thus, the presence of ACLF-1 determines a risk of death at 28 and 90 days of 18 and 39%, respectively, a figure that increases in ACLF-2. 54.5% were men, the average age 54.2 years \pm 10.3, 27.3% had arterial hypertension and 9.1% DM2, the etiologies were by enol in 54.5%, HAI 18.2%, PBC 18.2% and 9.1% by MAFLD. Mean arterial pressure was 77.0 ± 8.1 , QTc 449.9 ± 57.6 , and HR 78.54. The Child-Pugh scale had mainly C score values in 36.4% of the cases, followed by 27.3% in 12-point scores, scores of 10, 11 and B had only one case, respectively (9.1%). The MELD score was 10 at 40 points, 27.3% of the patients reported 18 points, a case similar to the MELD-NA from 13 to 40, with 18.2% of the patients at 21 points and a similar percentage at 29 points. CLIF score was distributed in 54.5% in 1, 27.3% in 2 and 18.2% in 0. PSAP had a mean of 31.2 ± 8.3 and diastolic dysfunction, it appeared in two cases as isovolumic relaxation and in two as a slow relaxation pattern, the other patients had various types of diastolic dysfunction, the natriuretic peptide was 314.1 pg / ml with a range of 13.1 to 1270.0 pg / ml . Troponin in 45.5% of the cases was less than 0.1 ng / L , in 27.3% $<0.05 \text{ ng / L}$, in 18.2% $<0.01 \text{ ng / L}$ and 9.1% was 0.026 ng / L . CK-MB in 90.9% was less than 1.0 U / L and in 9.1% it was 1.8 U / L . TAPSE had an average of $23.2 \text{ MM} \pm 4.3$.

Discussion: 30% of these patients died in this hospitalization With an average of 30 ± 10 days hospitalized. The decompensating cause was 72% ascites, 20.5% hepatorenal syndrome and 7.5 other causes,