

P 56- SHORT-TERM RESPONSE OF P300 EVOKED POTENTIAL IN PATIENTS WITH MINIMAL HEPATIC ENCEPHALOPATHY TREATED WITH L-ORNITHINE, L-ASPARTATE

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Introduction and Objectives: The clinical alterations of Minimal Hepatic Encephalopathy (MHE) include subtle changes in cognitive processes detectable only with tests such as the Psychometric hepatic encephalopathy score (PHES) and critical blink rate (FCP) or P300 cognitive evoked potentials. After treatment with L-Ornithine, L-Aspartate (LOLA) 18 grams/30 days, a decrease or normalization in the PHES score, an increase in FCP, and a reduction in the latency of the P300 potential have been observed. In the short term, it is unknown if there are changes in these three indicators of the cognitive status of patients with MHE. This study aimed to detect changes in the potential cognitive P300 of patients treated with LOLA 18g/3 days.

Materials and Methods: Cirrhotic patients who attended the Liver Clinic of the Gastroenterology Service of the General Hospital of Mexico "Eduardo Liceaga" were included. The PHES test and FCP were applied, and the electroencephalogram (EEG) was recorded while visual stimuli were presented in a cognitive task to obtain the potential P300. The criteria for MHE were a PHES test score of less than -4 standard deviations (sd) and an FCP score of less than 39.0 Hz. EHM patients were given LOLA 6g/3 times a day for three days. Subsequently, the PHES, FCP, and P300 tests were repeated.

Results: 89 patients with liver cirrhosis participated, 54 women (60.7%) with 53±7.9 years of age and 8.3±3.4 years of schooling. Fifty-seven patients (64.0%) were positive for PHES and 64 were positive for FCP (71.9%). EHM (positive for PHES and FCP) was detected in 53 patients (59.6%). Thirty-six patients (68%) accepted treatment with LOLA or completed the three tests, of which 16 repeated the three tests. The median PHES before treatment was -5.0 ds(-1,-6) and after treatment with LOLA -3.0 ds(-2,-4). The difference was significant in the Wilcoxon test for paired samples $p < 0.0001$. The initial mean of the FCP was 37.03±1.8 Hz and the final was 39.8±2.1 Hz. The difference was significant for the student's t-test for related samples $p < 0.0001$. The P300 potential had an initial amplitude of 2.42±2.79 and a final one of 2.21±2.19, not being significant, in contrast to the initial latency of 410.06±63 milliseconds (ms) and the final one of 404.88±63.6 ms, being significant after treatment. with LOLA $p = 0.015$

Conclusions: Short-term (3 days) changes in MHE due to LOLA treatment were seen in PHES test scores, FCP test scores, and P300 evoked potentials. The P300 potentials reflect the state of the EEG when performing cognitive tasks of attention. The improvement in this indicator is already known at 30 days of treatment and with the present study, it was determined that immediately at the start of treatment with LOLA, there is an improvement in their cognitive status.

P- 57 SURVIVAL AND LIVER TRANSPLANTATION FOR PATIENTS WITH ACUTE ON CHRONIC LIVER FAILURE IN URUGUAY

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Introduction and Objectives: Acute on chronic liver failure (AoCLF) is a syndrome characterized by acute decompensation of a patient with cirrhosis, with multi-organ failure and high short-term mortality. Liver transplantation (LT) is the treatment of choice. Characterizing these patients is important to optimize the best management strategy. This study aimed to assess the survival of patients with AoCLF evaluated for LT in Uruguay and to identify variables associated with mortality.

Materials and Methods: Retrospective analysis of adult patients evaluated for LT with AoCLF in the National Liver Transplant Program of Uruguay (January 2018 - December 2021).

Results: 97 patients were evaluated, and 25 (26%) had AoCLF. The median age was 51 ± 12 years. 64% were male. The most frequent etiology of cirrhosis was alcoholic (n:11, 44%). The MELD-Na score at diagnosis was 29.4 ± 6.3. Twenty-one patients were Child-Pugh C. The grades of AoCLF were 1 in 9, 2 in 11, and 3 in 5 patients. In 64% of patients, a precipitating cause was identified: intercurrent infection in 13, upper gastrointestinal bleeding in 5, and acute alcoholic hepatitis in 2. The CLIF-C ACLF score at diagnosis was 48.1 ± 9.8. 13 patients progressively increased the number of failures, and 9 of them had an intercurrent infection. Twelve patients were listed, and 6 of them were transplanted. Overall mortality was 72%, on the waiting list 54% and post-LT 33%. Survival was different among patients with LT vs. non-LT ($p < 0.001$) (Figure 1), according to the degree of AoCLF ($p = 0.001$) and if an intercurrent infection was present ($p = 0.022$).

Conclusions: AoCLF is a frequent indication of LT in Uruguay, with high mortality associated with the degree of ACLF, the presence of infection and non-transplantation. It is important to achieve transplantability of these patients, given the improvement in survival with LT.

Figure: Survival of patients with AoCLF with LT and non-LT.

