Annals of Hepatology 27 (2022) 100782

Contents lists available at ScienceDirect

Annals of Hepatology

journal homepage: www.elsevier.es/annalsofhepatology

Abstracts Asociación Mexicana del Hígado (AMH)

Short-term efficacy and safety of l-ornithine l-aspartate therapy in patients with cirrhosis and minimal hepatic encephalopathy: a real-life cohort study

AB Moreno-Cobos, F Higuera-de la Tijera, CI Hinojosa-Segura, D Montemira-Orozco, J Reyes-Méndez, IG Cruz-Reyes, J Zavala-Ramírez, D Santana-Vargas, A Servín-Caamaño, JM Abdo-Francis, JL Pérez- Hernandez

Department of Gastroenterology and Hepatology. General Hospital of Mexico "Dr. Eduardo Liceaga." Mexico City, Mexico

Introduction and Objectives: MHE is related to a higher risk of accidents and deterioration in the quality of life; it can be detected with PHES and CFP. There is currently insufficient evidence that treatment with oral LOLA improves performance in PHES and CFP in patients with MHE. This study aimed to verify the response and safety of LOLA treatment in a real-life cohort of patients with MHE.

Materials and Methods: Cirrhotic patients in the Hepatology clinic diagnosed with MHE received LOLA 6 grams three times a day for three days and were reassessed with PHES and CFP. The results were analyzed by descriptive statistics, the comparison between parameters by paired t-Student or Wilcoxon test as appropriate, a value of $p<0.01$ was considered significant. The trial was approved by the research ethics committee, and informed consent was obtained.

Results: ninety-eight patients with cirrhosis were evaluated; 38.8% had baseline MHE, 68.4% were women, the mean age of 53.3 years, and the median education was nine years. According to Child-Pugh: 68.4% A, 23.7% B, and 7.9% C. 34 patients were analyzed, the PHES score improved significantly post-treatment (baseline -6.44±1.7 vs -2.79±1.9; $p<0.0001$), CFP improved (baseline 37± 1.8 vs 39.8±2.2; $p<0.0001$). According to PHES 88.2% and CFP 85.3%, patients showed remission. The incidence rate ratio for persisting with MHE was 4 and 5 per 34 person-times, and the prevented fraction of 0.88 and 0.85 according to PHES and CFP, respectively. No adverse effect was reported.

Conclusions: LOLA is effective in improving cognitive performance and reversing very early alterations in PHES and CFP in patients with cirrhosis and MHE.

Funding: Donation from LOLA by the volunteer ladies of the Hospital General de México "Dr. Eduardo Liceaga."

Declaration of interest: The authors declare no potential conflicts of interest.

https://doi.org/10.1016/j.aohep.2022.100783

Short-term response of p300 evoked potential in patients with minimal hepatic encephalopathy treated with l-ornithine, l-aspartate

CI Hinojosa-Segura[1], D Montemira-Orozco[1], A Burak-Leipuner[1], J Zavala-Ramírez[2], IG Cruz-Reyes[2], M Escobedo-Silva[1], F Higuera-de la Tijera[1], JL Pérez-Hernández[1], D Santana-Vargas[2,3]

[1] *Department of Gastroenterology and Hepatology. General Hospital of Mexico "Dr. Eduardo Liceaga." Mexico City, Mexico*
[2] *Research Department. General Hospital of Mexico "Dr. Eduardo Liceaga." Mexico City, Mexico*
[3] *Sleep Disorders Clinic. Department of Experimental Medicine. Faculty of Medicine. UNAM. Mexico City, Mexico*

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. The trial was approved by the research ethics committee, and informed consent was obtained.

Results: Eighty-nine 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 $p<0.0001$.