Per protocol analysis: 34 patients (4 eliminated without evaluation post-LOLA), PHES score improved (baseline -6.44 ± 1.7 vs. post-LOLA -2.79 ± 1.9 ; p<0.0001), CFF improved (baseline 37 ± 1.8 vs. post-LOLA 39.8 ± 2.2 ; p<0.0001). According to PHES, 30(88.2%) patients showed remission of MHE (p<0.0001). The incidence rate ratio for persisting with MHE was 4 per 34 person-time; that is, 0.1 (95\%CI: 0.04-0.3; p<0.0001), with the fraction prevented after exposure to LOLA being 0.88 (95\%CI: 0.67-0.96; p<0.0001). According to CFF, 29(85.3\%) patients showed remission of MHE (p<0.0001). The incidence rate ratio for persisting with MHE was 5 per 34 person-times; that is, 0.1 (95\%CI: 0.06-0.4; p<0.0001), with the fraction prevented after exposure to LOLA being 0.85 (95\%CI: 0.62-0.94; p<0.0001).

Conclusions: LOLA is effective in improving cognitive performance and is evaluated very early by PHES and CFF in cirrhotic patients with MHE.

https://doi.org/10.1016/j.aohep.2023.100933

P- 32 HEPATITIS A AND E VIRUSES IN CÓRDOBA, ARGENTINA: WASTEWATER-BASED EPIDEMIOLOGY AS A SILENT SENTINEL OF THE TREND OF VIRUS CIRCULATION IN THE COMMUNITY

Anabella Fantilli^{1,2}, Guadalupe Di Cola^{1,2}, Paola Sicilia³, Gonzalo Castro³, María De Los Ángeles Marinzalda^{4,5}, Ariana Cachi^{4,5}, Gustavo Ibarra⁶, Laura López⁷, Maria Gabriela Barbás⁸, Silvia Nates¹, Gisela Masachessi^{1,2}, Maria Belén Pisano^{1,2}, Viviana Ré^{1,2}

- ¹ Dr. J. M. Vanella Institute of Virology, Faculty of Medical Sciences, National University of Córdoba, Córdoba, Argentina
- ² National Council for Scientific and Technical Research (CONICET), CABA, Argentina
- ³ Central Laboratory Department, Ministry of Health of the Province of Córdoba, Córdoba, Argentina.
- ⁴ National Institute of Aeronautic and Space Medicine, FAA, Cordoba, Argentina
- ⁵ Faculty of the Air Force, National Defense University, Córdoba, Argentina.
- ⁶ Bajo Grande Municipal Sewage Effluent Treatment Plant-Laboratory of Physicochemical and Bacteriological Analysis, Edar Bajo Grande, Córdoba, Argentina
- ⁷ Epidemiology Area, Ministry of Health of the Province of Córdoba, Córdoba, Argentina
- ⁸ Secretariat of Prevention and Health Promotion, Ministry of Health of the Province of Córdoba, Córdoba, Argentina

Introduction and Objectives: Monitoring wastewater for traces of viruses allows effective surveillance of entire communities, including symptomatic and asymptomatic infected individuals, providing information on whether a specific pathogen is circulating in a population. Such is the case of hepatitis A and E viruses (HAV, HEV). This study aimed to detect HAV and HEV in wastewater samples from Córdoba, Argentina, to provide insights into their circulation dynamics.

Materials and Methods: Sewage samples were monthly and weekly collected from 2017 to 2020 and from 2020 to 2021, respectively, from 4 wastewater treatment plants located in different regions of Córdoba. Furthermore, sewage collectors of 7 neighborhoods in Córdoba city were weekly sampled during 2021. A

standardized methodology was carried out for virus concentration using PEG6000 and NaCl. After automated nucleic acid extraction, HAV and HEV molecular detection were performed by TaqMan® Fast Applied Biosystems single-step multiplex RT-qPCR and specific RT-Nested PCR. Positive samples were sequenced.

Results: From a total of 575 samples analyzed, 16 were RNA-HAV + (2.80%) and 17 RNA-HEV+ (2.96%). Eight and two sequences were obtained, respectively. The HAV+ specimens were genotype IA. The majority of them belonged to 2017-2018 and were genetically close to those reported in the clinical specimens from the same period when the HAV outbreak in men who have sex with men occurred in Córdoba. The HEV+ samples belonged to genotype 3, and HEV higher occurrence was in 2021, mainly in 2 neighborhoods from Córdoba city.

Conclusions: The results show HAV and HEV circulation in Córdoba, despite the low number of clinical cases reported, suggesting a continuous silent circulation of these viruses in the general population. Environmental surveillance of wastewater, together with clinical monitoring, are key tools to track the viral circulation trends over time in the population and to identify hotspots of virus excretion.

https://doi.org/10.1016/j.aohep.2023.100934

P-33 IMPACT OF SUSTAINED VIROLOGIC RESPONSE ON GLUCOSE PARAMETERS AMONG CHRONIC HEPATITIS C PATIENTS TREATED WITH DIRECT ACTING ANTIVIRALS

Hugo Cheinquer¹, Fabia Benetti¹, Alexandre de Araujo¹, Italo de Maman Jr¹, Cristina Cheinquer Coelho Borges², Fernando Wolff Herz¹

- ¹ Departament of Internal Medicine, Gastroenterology and Hepatology Division. Clinics Hospital of Porto Alegre. University Federal do Rio Grande do Sul. Porto Alegre. Brazil
- ² Departament of Internal Medicine, Gastroenterology and Hepatology Division. Clinics Hospital of Porto Alegre. University of Vale do Rio dos Sinos. Porto Alegre. Brazil

Introduction and Objectives: Sustained virological response (SVR) of hepatitis C virus (HCV) with direct acting antivirals (DAAs) improve survival and reduces progression to cirrhosis, decompensation and hepatocellular carcinoma. Glucose metabolism impairment is one of the most frequent extra-hepatic manifestations of chronic HCV infection. The impact of SVR on glycemic parameters and baseline variables associated with this outcome remains uncertain. This study aimed to evaluate glucose metabolism before and after SVR, as well as investigate the presence of baseline characteristics related to improvement in glycemic control.

Materials and Methods: Prospective study of chronic HCV infection patients treated with DAAs between January 2016 and December 2017 at Viral Hepatitis Outpatient Clinic of Hospital de Clinicas de Porto Alegre, Brazil. Inclusion criteria were SVR to DAA therapy with follow-up for at least 24 weeks after the end of therapy. The exclusion criteria were the presence of other etiology of liver disease. Glycated hemoglobin (A1C) was analyzed before and after treatment in all patients. Subgroups were stratified by cirrhosis, genotype, BMI, age and presence or absence of baseline glycemic disorder. The primary outcome was a change in glycemic homeostasis after HCV eradication without a change in pharmacologic therapy with an impact on glycemic control. Secondary outcomes were baseline variables associated with improvement of glucose control.