AEHVE

Spanish Alliance for the Viral Hepatitis Elimination

AEHVE recommendations on the screening of Hepatitis C during the pandemic and in the vaccination period against SARS-CoV-2

The World Health Organization (WHO) Assembly promoted over four years ago the Global Health Sector Strategy on Viral Hepatitis for the 2016-2021 period (1) and established the goal of eliminating hepatitis B and C in 2030. Then, Spain launched the Strategic Plan for Tackling Hepatitis C in the Spanish National Health System, designed in early 2015, which has allowed our country to be at the forefront of the world's countries in the elimination of hepatitis C, only behind Iceland (2). This boost, added to an enormous collective effort, both by scientific organizations and the Spanish Ministry of Health, Consumer Affairs and Social Welfare (3, 4), have made Spain one of the world leaders in the elimination of HCV and, with plans to eliminate it between 2023 and 2024, before the reference framework established by the WHO (5).

The COVID-19 pandemic is a barrier on the way to eliminating hepatitis C in our country and the rest of the world. This document reviews its impact on the diagnosis, treatment and potential elimination of hepatitis C in Spain, and includes a recommendation on the opportunity to offer HCV screening to people subjected to any type of diagnostic process for SARS-CoV-2 infection, including both theCOVID-19 diagnosis and vaccination against SARS-CoV-2.

Background

The COVID-19 pandemic has forced a very important part of health resources to be allocated to the care of patients infected by SARS-CoV-2, removing these resources from other pathologies (6, 7). For this reason, an increasing number of scientific societies are calling for the standardization of ordinary healthcare activity, making it compatible with the care of COVID patients. As with other diseases, this pandemic has worsened HCV infection care.

The real impact of the pandemic on diagnosis, treatment and, therefore, on the possibility of eliminating hepatitis C, is not known in its full dimension, but we do know some aspects that exemplify its importance, such as almost practical paralysis of HCV micro-elimination programs throughout the Spanish territory, a marked decrease in the number of new diagnoses of hepatitis C and, of course, a very significant reduction (close to 80% in some regions) of treatment with direct acting antivirals (DAAs). The hepatitis C cure has many beneficial effects both individually and collectively, but its review is not the objective of this document. As a

consequence of COVID-19, the lack of adequate care for these patients will significantly increase liver morbidity and mortality as suggested by some recent studies (8, 9). In fact, in our country, Dr. Buti and collaborators have linked the effect of the impact of delayed HCV diagnosis and treatment to the appearance of future advanced liver diseases and related deaths in the next 10 years, obtaining data that suggests a clear increased morbidity and mortality as well as the health cost associated with the greater progression of liver disease (10).

On the other hand, COVID-19 itself can induce, although it is rare, liver damage, and the therapeutic arsenal used against COVID-19 includes multiple potentially hepatotoxic drugs, for which the screening for infection by hepatotropic viruses has been recommended by our Ministry of Health in patients admitted for this disease.

Opportunities

The prescription of vaccines approved by regulatory agencies is already a reality in some countries such as the USA, Canada, UK and Spain. (11, 12). In our country, vaccination against SARS-CoV-2 will be extended to a large part of the Spanish population during this year. In addition, tests for the screening and / or diagnosis of SARS-CoV-2 infection are currently being carried out. In this sense, we must seize the opportunity to link the diagnosis of SARS-CoV-2 and / or immunization against it with the screening and elimination of HCV.

As the vast majority of over-16s Spanish population will go to health facilities for vaccination in 2021 (13), they could be evaluated to detect antibodies against HCV, either by means of a conventional blood collection or by dried blood spot (DBS). Thus, even during one of the greatest health crises of the last century, the integration of HCV detection programs with immunization against SARS-CoV-2 will be a strategy of maximum profitability from a health public point of view.

Taking into account the particularities of each region and when the health situation allows it, both in the care part and in the activity of the Microbiology services, it would be advisable to include the determination of antibodies against HCV in the diagnostic studies of SARS-CoV-2, first in the health field, but also out of health field later on. Likewise, the moment of vaccination against SARS-CoV-2 is a unique opportunity to carry out HCV screening, since practically the entire population will go to health centers for this reason, including vulnerable populations whose contact with the healthcare system is exceptional.

Depending on the type of health and / or social center where the vaccination is carried out and depending on whether or not venipuncture is performed, each Spanish region and each health and / or social center can choose the screening methodology that best suited to their infrastructure: a conventional serological determination, an antibody determination using on-site laboratory tests (or immediate diagnostic tests) or, perhaps the most efficient option in many cases, using DBS. This screening should be addressed, first, to the general population between 40 and 70 years of age, in which a higher prevalence of HCV infection is well known. Similarly, the screening effort should be addressed especially to vulnerable populations, with special attention to harm reduction centers, addiction treatment centers, and in general to all those health and non-health structures which take care of this population, including immigrants from areas with a high prevalence of HCV infection, injecting drug users, and other vulnerable populations with a high prevalence of HCV infection.

Recommendations

Scientific societies, entities and patient associations AEEH / FEEH (Spanish Association for the Study of the Liver/ Spanish Foundation for the Study of the Liver), SemFYC (Spanish Society of Family and Community Medicine), SEPD (Spanish Society of Gastroenterology), SESP (Spanish Society of Prison Health), SEIMC (Spanish Society of Infectious Diseases and Clinical Microbiology, SEPD (Spanish Society of Dual Pathology), Socidrogalcohol, SEFH (Spanish Society of Hospital Pharmacy), SEMERGEN (Society Spanish Primary Care Physicians), SEV (Spanish Society of Virology), ISGlobal (Barcelona Institute for Global Health) and SEMG (Spanish Society of General and Family Physicians), FNETH (The National Federation of Liver Transplant Patients), ASCCAT (Catalan Association of patients with Hepatitis C) and PLAFHMadrid, all of them members of the Spanish Alliance for the Viral Hepatitis Elimination, recommend:

- Standardize health care for patients with hepatitis C, including proper diagnosis, improving the linkage to care and starting treatment in all cases where it is indicated.

- Immediately restart hepatitis C micro-elimination programs, especially those aimed at vulnerable populations, in which the impact of the interruption of HCV elimination programs will be particularly harmful.

- Offer HCV, and HBV and HIV screening to all people who undergo serological diagnosis against SARS-CoV-2, especially to those between 40 and 70 years of age and vulnerable populations.

- Link SARS-CoV-2 screening, COVID-19 diagnosis, and SARS-CoV-2 immunization programs to screening for HCV infection.

- It is necessary to assess the role of Primary Care, both to carry out immunization against SARS-CoV-2 and to screen for HCV infection, and therefore, it must be provided with the necessary resources for its performance.

Bibliography

1. World Health Organization, Global Health Sector Strategy for Viral Hepatitis 2016-2021. Towards the end of viral hepatitis. WHO / HIV / 2016.06.https://www.who.int/hepatitis/strategy2016-2021/ghss-hep/en/

2. Strategic Plan to address Hepatitis C in the HNS (PEAHC). Ministry of Health, Consumer Affairs and Social Welfare. October 2020. https://www.mscbs.gob.es/ciudadanos/enfLesiones/enfTransmisibles/hepatitisC/PlanEstrategicoHEPATITISC/docs/ Plan_Estrategico_Abordaje_Hepatitis_C_(PEAHC).pdf.

3. Crespo J, Albillos A, Buti M, Calleja JL, García Samaniego J, Hernández Guerra M, et al. Elimination of hepatitis C. Positioning document of the Spanish Association for the Study of the Liver (AEEH). Rev Esp Enferm Dig. 2019 Nov;111(11):862-873. doi: 10.17235/ reed.2019.6700/2019. PMID: 31657609.

4. HCV infection screening guide. Ministry of Health, Consumer Affairs and Social Welfare.: https://www.mscbs.gob.es/ciudadanos/enfLesiones/enfTransmisibles/sida/docs/GUIA_DE_CRIBADO_DE_LA_INFECCION_POR_EL_VHC_2020.pdf

5. Razavi H, Pawlotsky JM, Lazarus JV, Feld J, Bao Y, Pires dos Santos AG, et al. Global timing of hepatitis C virus elimination in high-income countries: an updated analysis.

Poster pre- sented in The Digital International Liver Congress 2020. THU365.

6. Crespo J, Fernández Carrillo C, Iruzubieta P, Hernández-Conde M, Rasines L, Jorquera F, et al; COVID-19 SEPD/AEEH Group. Massive impact of coronavirus disease 2019 pandemic on gastroenterology and hepatology departments and doctors in Spain. J Gastroenterol Hepatol. 2020 Nov 12. doi: 10.1111/jgh.15340. Epub ahead of print. PMID: 33184937.

7. Picchio CA, Valencia J, Doran J, Swan T, Pastor M, Martró E, Colom J, Lazarus JV. The im- pact of the COVID-19 pandemic on harm reduction services in Spain. Harm Reduct J. 2020 Nov 4;17(1):87. doi: 10.1186/s12954-020-00432-w. PMID: 33143699; PMCID: PMC7609370.

8. Blach S, Kondili LA, Aghemo A, Cai Z, Dugan E, Estes C, Gamkrelidze I. et al. Impact of COVID-19 on global hepatitis C elimination efforts, Journal of Hepatology (2020),1-
6. https:// www.journal-of-hepatology.eu/action/showPdf?pii =S0168-8278%2820%2930523-7.

9. Kondili LA, Marcellusi A, Ryder S. Craxi A. Correspondance Digestive and Liver Disease. Digestive and Liver Disease 52 (2020)947–949.

10. Buti M, Domínguez-Hernández, Casado MA. Impact of the COVID 19 Pandemic on HCV Elimination in Spain. J Hepatol 2020; in press. PII: S0168-8278(20)33891-5. DOI: https://doi. org/10.1016/j.jhep.2020.12.018

11. https://www.fda.gov/emergency-preparedness-and-response/coronavirus-dis- ease-2019-covid-19/pfizer-biontech-covid-19-vaccine

12. https://www.fda.gov/emergency-preparedness-and-response/coronavirus-dis- ease-2019-covid-19/moderna-covid-19-vaccine

13. https://www.mscbs.gob.es/gabinetePrensa/notaPrensa/pdf/24.11241120144431769.pdf