XII Congreso Nacional de GESIDA
XIV REUNIÓN DOCENTE DE LA RED DE INVESTIGACIÓN EN SIDA
Málaga 29 noviembre - 2 diciembre 2021

Comunicación PO-07

Clinical outcomes according to regimens for eradication of HCV in HIV/HCV-coinfected patients with advanced fibrosis or cirrhosis

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Background and Aim

- IFN is an immunomodulator with functions beyond its antiviral properties, including antifibrogenic effects by the downregulation of collagen gene transcription [1].
- These effects were hypothesized to explain the improvement in fibrosis among patients with HCV treated with IFN who did not achieve a SVR [2,3].
- However, in a large, clinical trial, long-term therapy with IFN did not improved outcomes in patients with HCV and advanced fibrosis or cirrhosis, who had not had SVR to initial treatment with IFN and RBV [4].
- We assessed clinical outcomes according to regimens for eradication of HCV in HIV/HCV-coinfected patients with advanced fibrosis or cirrhosis.

1. Cordero-Espinoza L, et al. J Clin Invest 2018; 128(1): 85-96
2. Shiffman ML, et al. Gastroenterology 1999; 117(5): 1164-72.
3. Lissen E, et al. AIDS 2006; 20(17): 2175-81.
4. Di Bisceglie AM, et al. N Engl J Med 2008; 359(23): 2429-41.

Methods

Design
Retrospective analysis of 4 cohorts of HIV/HCV-coinfected patients receiving anti-HCV therapy between January 2000 and December 2015 in 21 centers in Spain: GeSIDA-3603, GeSIDA-3603b, Madrid-CoRe, and ESCORIAL Study [1-4].

Eligibility criteria
1) Confirmed HCV infection by HCV-RNA in plasm
2) Advanced fibrosis (F3) or cirrhosis (F4)
- F3: Liver biopsy or liver stiffness (LS) >9.9 & ≤12.5 kPa by TE.
- F4: Liver biopsy, LS >12.5 kPa, or prior or current history of liver decompensation (ascites, variceal bleeding, encephalopathy)

3) Achievement of SVR following anti-HCV therapy.

Data
Clinical data were recorded at each institution using a common database via an online form. This database included all demographic, clinical, virological, and laboratory data. All the centers were monitored to verify that all the information in the database was consistent with the patient's medical records.

Ethics
The study was approved by the Ethics Committee of Hospital General Universitario Gregorio Marañón (FHG-AAD-2018-01)

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1. Berenguer J, et al. Hepatology 2009; 50(2):407-413.
2. Carrero A, et al. J Acquir Immune Defic Syndr 2020; 83(3):292-300.
3. Berenguer J, et al. Hepatology 2018; 68(1):32-47.
4. Diez C, et al. Clin Infect Dis 2020; 71(10):2726-2729.

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Dates
- Baseline: date of end of anti-HCV therapy resulting in SVR
- Censoring date: December 31, 2019

Liver disease categories
- Advanced fibrosis (F3)
- Compensated cirrhosis (F4-Co)
- Decompensated cirrhosis (F4-De)

Outcomes
1. Clinical progression: death, decompensation, or HCC*
2. Liver-related event (LRE): decompensation, or HCC*
3. HCC

** whichever occurred 1st.*

Statistics
- Multivariable Cox or Fine & Grey regression analysis to assess the association of treatment regimen with clinical outcomes.
- Management of missing data: multiple imputations by chained equations (MICE) after confirmation that date were missed at random by Little MCAR test.
- Adjustment variables (baseline): liver-disease category, age, sex, smoking, current high alcohol intake (>50 g/d), prior injection drug use, CDC category C, metabolic syndrome, LS by TE, FIB-4, triglycerides and glucose (TyG) index, and hepatic steatosis (HIS) index.

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Results

- 1484 patients,
  - median age 52 years, 79% ♂, 87% IDU
  - 98% on ART, 92% HIV-RNA <50 c/mL, median 521 CD4 cells/mm3
- Liver disease categories
  - F3 = 473 (32%)
  - F4c = 853 (57%)
  - F4d = 158 (11%)
- Anti-HCV regimens
  - peg-IFN + RBV 115 (8%)
  - peg-IFN + DAAs 69 (5%)
  - all oral-DAAs 1300 (88%)

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Clinical outcomes after a median follow-up of 42 months

	F3 N = 473	F4c N = 853	F4d N = 158
Clinical progression	25 (5%)	87 (10%)	41 (26%)
Death	21 (4%)	53 (6%)	25 (16%)
LRE	6 (1%)	48 (6%)	24 (15%)
HCC	4 (1%)	22 (3%)	6 (9%)

Clinical progression: death, decompensation, or HCC

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Event	Adjusted (s)HR*	95% CI	P
Clinical progression			
- Peg-IFN + RBV	Reference		
- Peg-IFN + DAAs	1.79	0.56 - 5.68	0.326
- All-oral DAAs	1.81	0.66 - 4.94	0.247
LRE			
- Peg-IFN + RBV	Reference		
- Peg-IFN + DAAs	1.16	0.32 - 4.22	0.817
- All-oral DAAs	0.90	0.33 - 2.49	0.845
HCC			
- Peg-IFN + RBV	Reference		
- Peg-IFN + DAAs	0.32	0.03 - 3.13	0.330
- All-oral DAAs	0.67	0.17 - 2.63	0.566

Cox or Fine & Grey Regression analysis
(death as the competing event)

Adjustment variables (baseline):
- Liver-disease category
- Age, sex
- Prior IDU
- Smoking, high alcohol intake (>50 g/d)
- CDC category C
- Liver stiffness by TE, FIB-4
- Metabolic syndrome
- Triglycerides and glucose (TyG) index
- Hepatic steatosis (HIS) index

Conclusions

1) In this large cohort of HIV/HCV coinfected patients with advanced fibrosis or cirrhosis who achieved SVR, the anti-HCV regimen was not associated with clinical outcomes.
2) Our findings do not support a beneficial effect of IFN on the natural history of HCV beyond its antiviral properties.

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SESIÓN PÓSTERES DISCUTIDOS
Posters orales
Clínico-epidemiológicos
PO-01 a PO-12

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