Late presentation of chronic hepatitis B and C virus in people who inject drugs in Spain despite unrestricted access to HBV and HCV therapy

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BACKGROUND

Chronic infection with hepatitis B and C virus (HBV and HCV) can progress to liver cirrhosis and lead to decompensated liver disease, hepatocellular carcinoma and liver-related death. Antiviral agents against HBV are very effective in suppressing viremia and direct acting antivirals (DAAs) for HCV have sustained virologic response rates of ≥95% and greatly reduce the risk of complications if treatment is initiated before the onset of advanced liver disease (ALD). The aim of this study is to assess the prevalence of late presentation of chronic hepatitis in people who inject drugs (PWID) in Spain.

METHODS

We conducted a retrospective cohort study through clinical history revision of patients seeking first time care with a liver specialist at nine tertiary Spanish hospitals with available 2018 data. Late presentation includes ALD defined by significant fibrosis (≥F3 assessed by either APRI score >1.5, FIB-4 >3.2, transient elastography (FibroScan) >9.5 kPa or biopsy ≥METAVIR stage F3) with no previous antiviral treatment. Prevalence of ALD at first consultation, mode of transmission and risk factors were analysed.

RESULTS

1,115 patients chronically infected were identified: 217 with HBV and 898 with HCV. Advanced liver disease was detected in 14.7% (n=32) of HBV cases and in 25.3% (n=227) for HCV (Figure 1). Injecting drug use was the most frequent mode of transmission of HCV infection (25.9%; n=233) and 58.5% (524) had an unknown mode of transmission. 77.1% (n=168) of the HBV cases had an unknown mode of transmission and none reported cases due to injecting drug use (Table 1). Overall, 24.9% of PWID presented late for HCV care.

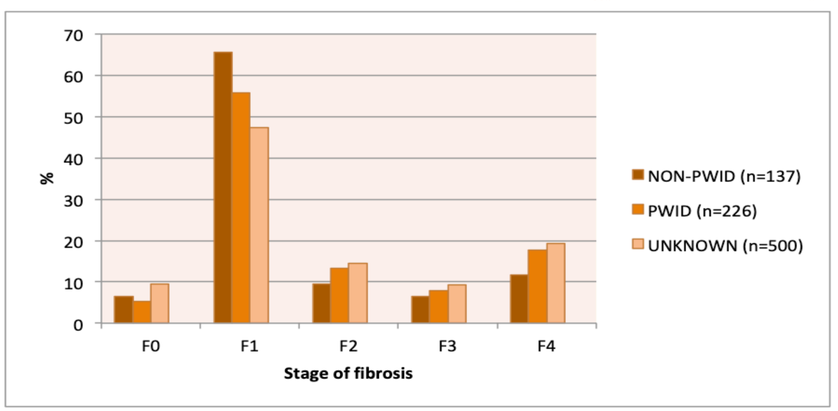
CONCLUSIONS

Late presentation with HBV and HCV is common in Spain despite unrestricted access to antiviral therapy. To improve outcomes and reach the elimination goal adopted by WHO, strategies addressing PWID are essential. The high percentage of unknown modes of transmission could contribute to an underestimation of the real number of PWID presenting late with viral hepatitis.

Table 1. Characteristic of HBV and HCV patients in nine Spanish centers and bivariate analysis of late presentation

		HBV				HCV			
		Total	Individuals with late presentation (%)	Crude OR (95% CI)	p- value	Total	Individuals with late presentation (%)	Crude OR (95% CI)	p- value
Sex		**(n=217)**				**(n=897)**			
	Female	91	8 (8.8)	1	0.043*	332	58 (17.5)	1	<0.001*
	Male	126	24 (19.0)	2.41 (1.02-5.69)		565	168 (29.7)	2.01 (1.44-2.82)	
Age		**(n=217)**				**(n=896)**			
	<55 years	140	14 (10.7)	1		420	72 (17.1)	1	
	55-65	43	9 (22.5)	2.42 (0.96-6.12)	0.061	253	76 (30.0)	2.13 (1.47-3.09)	<0.001*
	65-75	15	3 (21.4)	2.27 (0.56-9.16)	0.246	113	35 (30.9)	2.17 (1.35-3.50)	0.001*
	>75	19	6 (40.0)	5.57 (1.72-17.99)	0.004*	110	43 (39.0)	3.34 (2.09-5.33)	<0.001*
Nationality		**(n=216)**				**(n=874)**			
	Spanish	102	21 (22.8)	1	0.011*	801	199 (25.7)	1	0.505
	non-Spanish	114	10 (9.3)	0.34 (0.15-0.78)		73	20 (29.4)	1.20 (0.69-2.07)	
Mode of transmission		**(n=215)**				**(n=896)**			
	Non-PWID	47	7 (14.9)	1		139	25 (17.9)	1	
	PWID	0	0	-	-	233	58 (24.9)	1.54 (0.91-2.61)	0.104
	Unknown	168	24 (14.3)	0.90 (0.36-2.28)	0.839	524	144 (27.5)	1.81 (1.12-2.91)	0.014
Origin of referral		**(n=217)**				**(n=898)**			
	Primary care	123	14 (11.4)	1		373	92 (24.7)	1	
	Gastroenterology & hepatology (different center)	17	4 (23.5)	2.3 (0.67-8.41)	0.178	139	36 (25.9)	1.01 (0.64-1.59)	0.940
	Other specialty (same center)	38	4 (10.5)	0.95 (0.29-3.11)	0.936	97	25 (25.8)	1.02 (0.61-1.71)	0.928
	Other specialty (different center)	4	0	-	-	23	5 (21.7)	0.78 (0.28-2.17)	0.642
	Other	2	2 (100)	-	-	140	31 (22.1)	0.81 (0.50-1.29)	0.378
	Unknown	33	8 (24.2)	2.59 (0.97-6.94)	0.057	126	38 (30.2)	1.29 (0.82-2.03)	0.263

Figure 1. Stage of liver fibrosis of HCV patients at first hepatology consultation, by mode of transmission



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