Temporal changes and regional differences in treatment uptake of hepatitis C therapy in EuroSIDA

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Up to 30% of European HIV-positive patients tested for hepatitis C virus (HCV) are seropositive. All co-infected patients with chronic HCV and ≥ F2 fibrosis should be considered for HCV therapy given their increased risk of death from liver disease. Despite this the extent to which co-infected patients initiate HCV treatment is not well described. The aims of this study were to determine the rate of HCV treatment uptake among co-infected patients and to estimate the effect of treatment on all-cause and liver-related death. EuroSIDA patients positive for HCV antibody and HCV-RNA were included in the study. Baseline was defined as the date of recruitment or HCV seroconversion, whichever occurred later. Poisson regression was used to identify temporal changes and regional differences in HCV treatment uptake (use of at least interferon-α [peg-IFN] + ribavirin) and to study the association between HCV treatment and progression to all-cause and liver-related death. 1947 patients were included, with a median follow-up time of 107 months (IQR: 57–156). Overall 456 (23.4%) of HIV/HCV co-infected patients have received HCV therapy so far. The incidence of HCV treatment rose from 0.29 (95% CI: 0.13–0.45) per 100 person-years follow-up in 1998 to 5.26 (95% CI: 3.87–6.5) in 2007, before falling to 3.73 (95% CI: 2.40–5.06) in 2009. There were considerable regional differences (Figure). In a multivariable model treatment incidence increased 11.0% (95% CI: 4.0–18.4; p = 0.0016) per 2 calendar years. Patients with CD4 cell counts greater than 350 cell/mm3 (incidence rate ratio [IRR]: 1.75 [1.37–2.23; p < 0.0001]), HIV-RNA less than 500 copies/ml (IRR: 1.58 [1.18–2.12; p = 0.0023]), with HCV genotype 3 (IRR: 1.55 [1.21–1.98; p = 0.0006]) compared to genotype 1) and those from south (IRR: 1.99 [1.45–2.72; p < 0.0001] and east central Europe (IRR: 1.61 [1.11–2.34; p = 0.011) compared to west Europe, were more likely to initiate treatment. In a multivariable model treatment for HCV was not significantly associated with all-cause death (355 deaths, IRR: 0.81 [95% CI: 0.54–1.19; p = 0.28]) or liver-related death (95 deaths, IRR: 1.0 [95% CI: 0.50–2.02; p = 0.99]). The incidence of treatment for HCV among co-infected patients increased from 1998 until 2007 and was common in those with higher CD4 cell counts and lower HIV-RNA, consistent with HCV treatment guidelines. HCV treatment was not associated with all-cause or liver-related death in this population.

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