

EV0031

ePoster Viewing

HIV/AIDS (incl anti-retroviral drugs, treatment & susceptibility/resistance, diagnostics & epidemiology)

Influence of plasma HIV viraemia on liver stiffness in HIV mono-infected patients and HIV-HCV co-infected patients

Monica Basso¹, Saverio Parisi^{*2}, Renzo Scaggiante³, Marzia Franzetti³, Samantha Andreis¹, Anna Maria Cattelan³, Carlo Mengoli², Mario Cruciani⁴, Massimo Andreoni⁵, Sara Piovesan⁶, Giorgio Palu⁷, Alfredo Alberti⁸

¹*Department of Molecular Medicine, Padova, Italy*

²*University of Padova, Department of Molecular Medicine, Padova, Italy*

³*Infectious Disease Unit, Padova Hospital, Padova, Italy*

⁴*Center Diffusive Diseases, Verona, Italy*

⁵*Università Torvergata, Medicina Dei Sistemi, Roma, Italy*

⁶*University of Padova, Padova, Italy*

⁷*University of Padova, Department of Molecular Medicine, Department of Molecular Medicine, Padova, Italy*

⁸*University of Padova, Padova, Italy*

Background: The aim of this study was to determine the influence of plasma HIV viremia (pHIV) on liver fibrosis assessed with transient elastography (TE) in HIV monoinfected patients and HIV-HCV coinfecting pts: we focused on the 12 month period before TE was performed.

Material/methods: The patients had to be (HBsAg)-negative, HCV RNA positive in case of HCV positivity (HCV therapy-naïve or with an unsuccessful antiviral treatment ended six months before TE was performed), with regular viro-immunological follow-up of HIV disease and a valid TE performed in the time interval December 1 2013 - September 30 2015. Patients were classified as having undetectable HIV viremia if no plasma value exceeded 50 copies/ml; only a single viral blip throughout every year was tolerated. The cut-off for significant fibrosis was set at 7.1 kPa and the value for "normal" LS at 4 kPa.

Results: A total of 273 patients were included: a detailed description is reported in Table 1. HIV-HCV patients showed higher liver stiffness respect to HIV monoinfected patients both in case of unsuccessful pHIV suppression and of pHIV undetectability. ($P < 0,0001$ and $P = 0,0001$ respectively). Interestingly, HIV mono-infected patients with detectable pHIV had significantly higher LS values respect to monoinfected subjects with undetectable pHIV (4.8 kPa vs 4.3 kPa, $p=0.0045$) and a lower percentage of patients with normal LS value (21.4 % vs 37.4%, $p= 0.0329$).

Conclusions: Our data suggested that inflammatory status evaluated as uncontrolled pHIV for a 12 months period may influence liver stiffness value, a non-invasive assessment of liver fibrosis, in HIV mono-infected but not in HIV-HCV co-infected pts.

Table 1. Characteristics of HIV-HCV coinfecting patients and HIV monoinfected patients.

Variables	HIV-HCV coinfect Detect HIV RNA (24 pts)	HIV monoinfected Detect HIV RNA (70 pts)	HIV-HCV coinfect Undetect HIV RNA (56 pts)	HIV monoinfected Undetect HIV RNA (123 pts)
Age (mean, 95%CI)	47 (44.5-49.5)	42.7 (40.3-45.2)	48.4 (46.4-50.3)	49.4 (47.2-51.6)
Male, n (%)	20 (83.3)	65 (92.9)	44 (78.6)	105 (85.4)
BMI (median, 95% CI)	24.3 (21.2-25.3)	24.1 (22.8-24.8)	22.9 (21.9-23.9)	23.8 (23-24.5)
Liver stiffness (kPa) (median, 95% CI)	7 (5.7-9)	4.8 (4.4-5)	7.6 (6.4-10.1)	4.3 (4.1-4.4)
Pts with kPa ≤4, n (%)	2 (8.3)	15 (21.4)	4 (7.1)	46 (37.4)
Pts with kPa ≥7.1, n (%)	12 (50)	8 (11.4)	33 (58.9)	11 (8.9)
CD4 count at nadir (cells/mm ³), (median and 95% CI)	193 (132-340)	387 (300-416)	250 (202-290)	300 (252-330)
HCV RNA at T-1 (IU/ml) (median and 95% CI)	1646769 (608807-2798902)	n.a.	1702648 (973526-2650474)	n.a.
HIV RNA at T-1 (copies/ml), median and 95% CI	6097 (588-35049)	22190 (6501-37826)	n.a.	n.a.