

INJECTING DRUG USE IS ASSOCIATED WITH TREATMENT FAILURE IN HIV POSITIVE MEN INFECTED WITH ACUTE HEPATITIS C

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BACKGROUND

Acute hepatitis C virus (HCV) infection in HIV-positive men who have sex with men (MSM) is associated with treatment success rates of 59-73%. We aimed to assess the impact of injecting drug use on treatment success rates in a single centre of HIV-positive patients with acute HCV infection.

METHODS

Patients were recruited prospectively and injecting drug use risk information collected following retrospective case note review (Figure 1). Sequence analysis was carried out by PCR amplification, cloning and sequencing of the HCV envelope hypervariable region 1 (HVR-1).

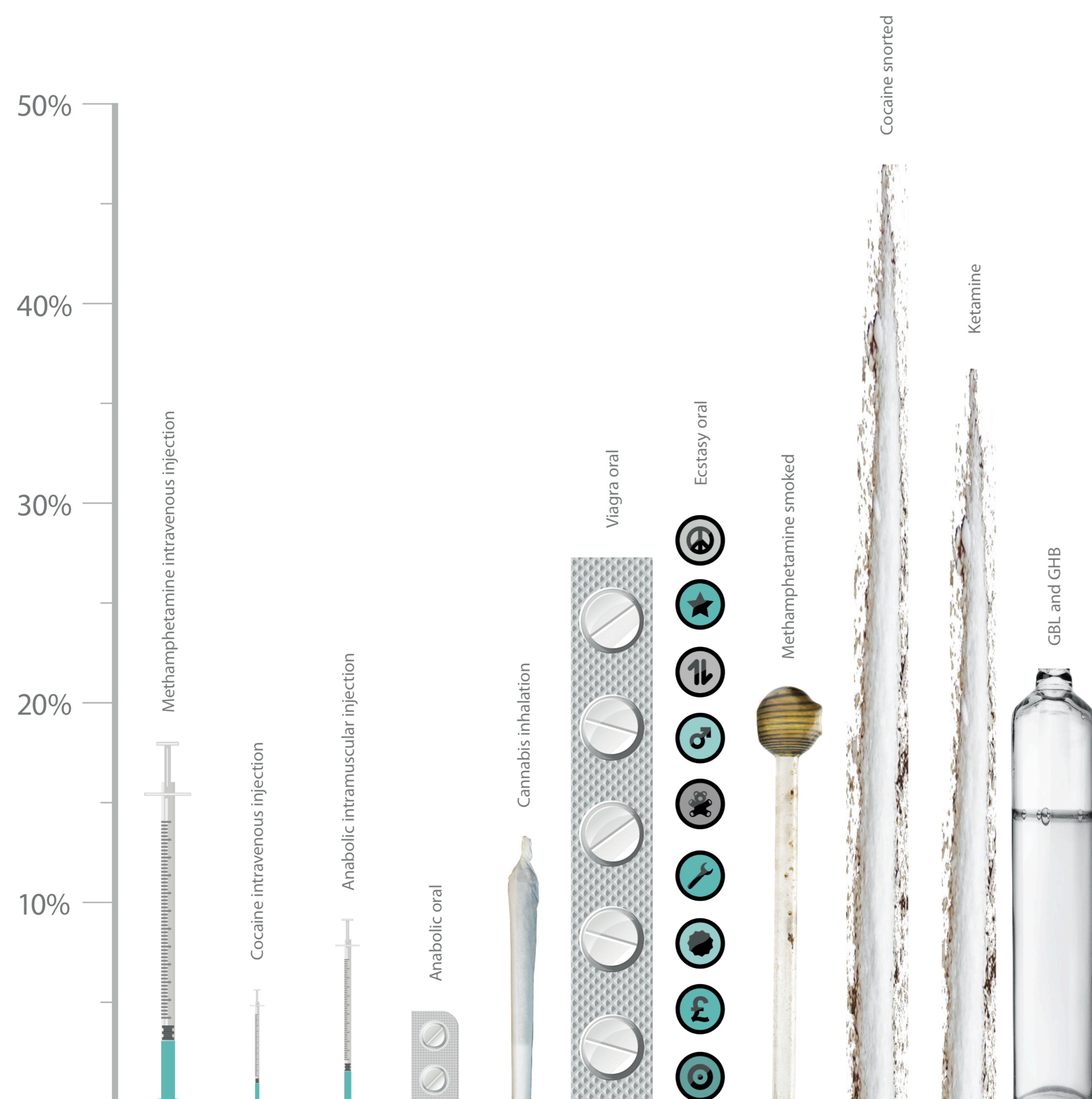


Figure 1 : Graph showing percentage of subjects (n=132) using each different substance

RESULTS 2

The median age was 39 years in both IDU and non-IDU patients and the proportion of patients referred for treatment was not significantly different between groups. No patients withdrew from therapy. The median CD4 count was 520cells/mm³ and this did not significantly differ between groups. More IDU patients were on treatment with highly active antiretroviral therapy than nonIDU patients (75% versus 53%; p=0.07).

The overall sustained virological response rate (SVR) was 73% (n=59). However the SVR rate was significantly lower in IDU patients (39% n=7/18) versus non-IDU patients (81% n=38/47), p=0.002, OR 0.15 (Figure 2).

Recreational drug use was reported in 65% of the cohort but intranasal and oral drug use were not associated with a significant difference in outcome. Intravenous drug use was associated with a significantly higher level of genetic diversity (0.15 in IDU versus 0.01 in nonIDU p=0.02).

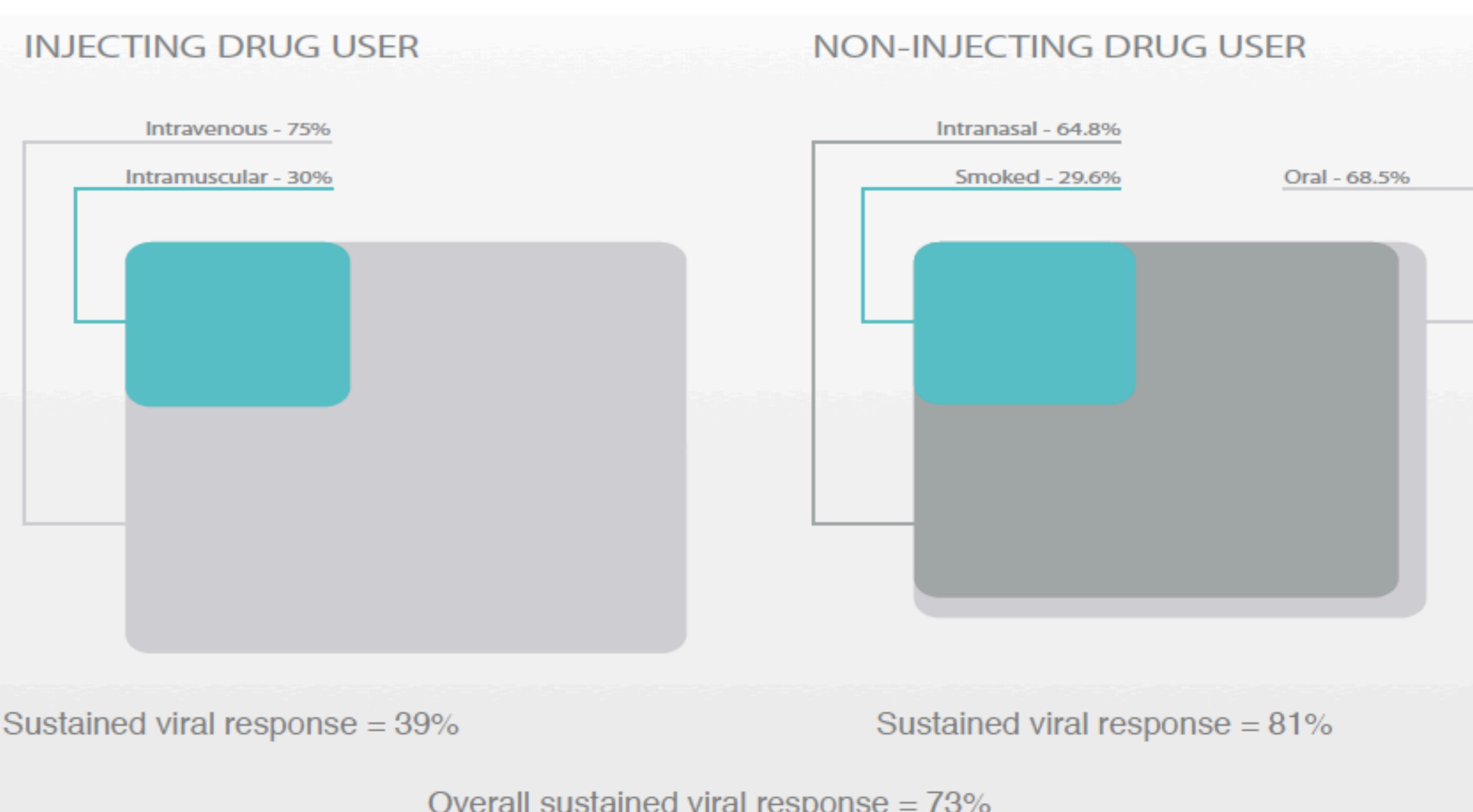


Figure 2 : Graph showing the percentage of injecting and non-injecting drug users and their routes of administration. Also shown is the sustained viral response to treatment shown by the two cohorts.

RESULTS

128 male patients were recruited into the study and 81 patients were treated with 48 weeks of pegylated interferon alpha and ribavirin. Treatment was discontinued if there was a <2log drop in viral load 12 weeks into treatment.

CONCLUSION

Injecting drug use is associated with a significantly lower likelihood of SVR in HIV-positive MSM with acute HCV infection and this is associated with higher genetic diversity within the HVR-1.