EVALUATION OF TREATMENT OF HCV INFECTION IN ACTIVE INJECTION DRUG USERS

Alimohammadi A1, Sharma S1, Hakobyan S1, Hsieh YL1, Tossonian H1, King A1, Conway B1

1Vancouver infectious Diseases Centre, Vancouver, Canada

Background: Approximately 70% of HCV infected individuals in Canada are people who inject drugs (PWID). However, many healthcare providers require PWID to be drug-free for 6-12 months before commencing HCV treatment. The aim of this study is to illustrate that HCV treatment can be successful in PWID without requiring a period of abstinence.

Methods: A retrospective observational study was conducted in active PWID (currently injecting recreational drugs) receiving HCV therapy between 2011 and 2015 at a multi-disciplinary inner city clinic, favouring engagement and retention in care of the target population. Data regarding HCV treatment, HIV co-infection status, as well as demographic and social variables was collected. The primary endpoint was a sustained virologic response (SVR) with respect to HCV infection.

Results: We treated 40 eligible subjects (34 male) with a median age of 53 years, 24 (60%) genotype1a/b, 10 (25%) genotype 3, 33 (83%) previously treatment naïve, 11 (27.5%) co-infected with HIV. With respect to illicit drug use, there were 25 (63%) using heroin, 28(70%) using cocaine, 9 (22.5%) using other stimulants and 23 (58%) on opiate substitution therapy. Regarding HCV therapy, 25(63%) received IFN-based and 15(37%) all-oral regimens. In total, 31(78%) subjects achieved SVR, 17 (68%) and 14(93%) on IFN-based and all-oral regimens (p<0.05 favouring all-oral regimens). Within the study population, 7 (64%) with HIV co-infection, 18(75%) with genotype 1, 9 (90%) with genotype 3, 21(84%) on heroin, 21 (75%) on cocaine and 7 (78%) using other stimulants achieved SVR. Three (8%) discontinued due to toxicity and 4(10%) relapsed. Finally, with a mean of 560 days of follow-up, there were no cases of reinfection.

Conclusion: Active PWID can be effectively treated for HCV infection with high SVR rates, especially with all-oral regimens. With structured follow-up, rates of reinfection can be minimized, enhancing treatment uptake in high-risk populations of “core transmitters” of HCV infection.