HCV REINFECTION NOT ASSOCIATED WITH OAT ENGAGEMENT, DRUG USE, OR SEXUAL RISK IN PERSONS WITH OPIOID USE DISORDER AND INJECTION DRUG USE: DATA FROM THE ANCHOR STUDY

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Background People with HCV, opioid use disorder (OUD), and ongoing injection drug use (IDU) who achieve sustained virologic response (SVR) remain at risk of reinfection. Opioid agonist therapy (OAT) and needle and syringe programs (NSP) are evidence-based strategies to reduce harms associated with IDU, including HCV reinfection. We sought to evaluate the rate of reinfection in a cohort of patients with access to OAT and NSP.

Methods ANCHOR is a single-center study evaluating treatment of HCV in PWID with chronic HCV, OUD, and IDU, set in an NSP. Patients who achieved sustained virologic response (SVR) were tested for reinfection, defined as a genotype switch or detectable viral load after SVR. Patients were administered surveys to assess for ongoing risk behaviors and OAT status.

Results 81 individuals achieved SVR and were followed after treatment completion for a median of 413 days (83-608days)**.** Subjects were predominantly male(76%), black(93%), middle-aged(median 58years), HIV-negative(96%), and non-cirrhotic(69%). Six individuals(7.4%) were reinfected a median of 409 days (range 147-517) after week 12, a rate of 8.4/100 person-years. Reinfection was not associated with post-week 12 opioid use(p=0.4), cocaine use(p=1.0), injection drug use(p=0.7), sexual activity(p=1.0), condom use(p=0.3), or OAT engagement at last visit (p=1.0). Of the 6 reinfected subjects, 4 reported ongoing IDU at follow-up visits, and 1 reported sharing needles. Of 34 patients who initiated collocated buprenorphine 1 year prior to analysis, rates of negative urine drug screen(31%) and time retained on buprenorphine (74%) were equivalent in those with and without reinfection.

Conclusions
In this cohort of high-risk PWID recently cured of HCV, we found moderate rates of HCV reinfection regardless of OAT engagement, drug use, or sexual risk. These data highlight the risk of transmission through non-needle drug paraphernalia, and reinforce the need for serial re-testing and risk modification counseling regardless of engagement in harm reduction strategies.

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