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LETTER TO THE EDITOR

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The unfulfilled promise of efficacy trials in HIV/hepatitis C co-infected patients

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Dear Editor,

With the improved efficacy of highly active antiretroviral therapy (HAART) for management of human immunodeficiency virus (HIV), hepatitis C virus (HCV) has emerged as a significant cause of morbidity and mortality in the HIV population.[1] The multinational CEASAR study estimated that the overall global prevalence of HCV/HIV coinfection in the HIV population is approximately16%, establishing HCV coinfection as a major challenge in HIV care.[1]

Although there is discordance in the literature on the impact of HCV on the natural history of HIV, the converse is untrue. HCV viral load is higher in coinfected hosts due to the immunosuppressant effects of HIV.[2,3] This is further evidenced by the 50% reduction in rate of spontaneous HCV clearance in HIV-positive as compared with HCV monoinfected patients.[3,4] Coinfected patients are also twice as likely to develop cirrhosis and 6 times as likely to develop hepatic decompensation.[5] This data underscores the importance of routine assessment for HCV in all HIV patients, and careful consideration for treatment of HCV in patients who are coinfected but with preserved CD4 counts.

Four randomized trials examining the safety and efficacy of combination therapy with peginterferon and ribavirin in coinfected patients determined that anti-HCV therapy has similar tolerability and safety than in monoinfected HCV patients, although there are unique treatment-related issues to consider in coinfected hosts. While anti-HCV therapy has no clear adverse influence on the control of HIV, the side effects of interferon and ribavirin are exaggerated in coinfected patients, especially if these patients are also receiving HAART.

The promise of acceptable rates of sustained virologic response (SVR) in efficacy trials have not translated into clinical practice. From 2000 to 2006, we examined the prevalence of HCV and treatment outcomes of HCV in all patients at the McMaster University HIV Clinic following approval by the Research Ethics Board. We determined that 103 of a total of 750 HIV patients (14%) were co-infected with HCV, and HCV treatment (pegylated interferon and ribaviron) was initiated in just 20 patients (19%) in the clinic. Only 12 patients completed treatment, with an early virologic response of 67% and SVR rate of 58%. Notable barriers to treatment initiation in the majority of our coinfected patients included substance abuse in 14%, poor compliance to medical instruction and follow-up care in 13%, uncontrolled HIV in 11%, and decompensated cirrhosis in 4%.

Our experience reflects the complex psychosocial barriers to HCV therapy initiation in the coinfected population, which we anecdotally feel are more pervasive that in the HCV monoinfected population. The dismal rates of HCV therapy initiation in our coinfected cohort underscores the need for further research on effectiveness and outcomes of HCV therapy in coinfected patients. Such research would hopefully generate innovative strategies to meet the multidisciplinary care needs of the coinfected patient, including successful treatment of HCV.

ABBREVIATIONS

- **EVR:** Early virologic response.
- **HAART:** Highly active antiretroviral therapy.
- **HCV:** Hepatitis C virus.
- **HIV:** Human immunodeficiency virus.
- **IVDU:** Intravenous drug use.
- **SVR:** Sustained virologic response.

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