

Significant Differences in Clinical Outcomes between HIV-Hepatitis C Virus Coinfected Individuals with and without Injection Drug Use History

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Objective

This study examined the different demographic and clinical characteristics, HIV treatment responses, and survival rates between HIV and hepatitis C (HCV) coinfecting individuals with and without a history of injection drug use (IDU).

Main Finding

After adjusting for HCV coinfection, IDU history independently elevates the risk of poorer clinical outcomes.

Importance of this Study

- About 18-20% of HIV-positive Canadians are coinfecting with HCV.
- The impact of HCV infection on HIV progression is unclear, and most research does not differentiate between individuals with and without a history of IDU. This may disregard the diverging social and demographic circumstances of coinfecting individuals.
- It is important to gain a better understanding of clinical outcomes among individuals who acquire HCV through different pathways in order to tailor future prevention and care.

How this Study was Conducted

- Data were analyzed from the CANOC collaboration, an interprovincial collaborative cohort of HIV-positive individuals on antiretroviral therapy in Canada.
- CANOC compiled HIV clinical, virological, immunologic, and demographic data from 8 cohorts across British Columbia, Ontario, Quebec.
- 1,254 coinfecting participants from the CANOC collaboration were included in this analysis.

Study Results

- The majority (57.2%) of those from the non-IDU study group were men who have sex with men (MSM), compared to 7.7% from the IDU group.
- After adjusting for age, province, baseline viral load, viral load testing rate, and year of ART initiation, individuals with IDU history were significantly less likely to achieve virologic suppression.
- Individuals with IDU history also had a significantly higher risk of mortality.

Implications

- Expanding HCV testing for HIV-positive MSM and conveying non-IDU transmission risk information through targeted public health messages may prove beneficial.
- Treatment and care should take into account the different characteristics of individuals living with both HIV and HCV because they have unique clinical needs.

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