Hepatitis C Virus Reinfection after Successful Treatment with Direct-Acting Antiviral Therapy in a Large Population-Based

SUMMARY

Why was the study done?

Hepatitis C virus (HCV) infection is a long-term viral infection that affects about 250,000 Canadians. If left untreated, it can result in serious liver disease and shorter lifespan. New medications, called direct-acting antivirals (DAAs), which have few side-effects and usually require no more than 12 weeks of treatment, are available to cure chronic HCV. However, cure does not result in immunity. People who engage in high risk activities such as those people who inject drugs sharing needles and syringes could acquire HCV infection again.

The World Health Organization (WHO) has set-out the goal of hepatitis C elimination by reducing number of new infection by 95% by 2030. Prevention of reinfection will be critical to achieving World Health Organization's elimination goals. This study used data from the British Columbia Hepatitis Testers Cohort (BC-HTC) to examine how frequently re-infection with HCV occurs following successful treatment with new HCV drugs.

What were the main findings?

In this research, about 4000 people who were cured after successful treatment were assessed for re-infection. Of these, 875 individuals recently used drugs and 1793 used drugs in the past. HCV reinfection was most common among people who are currently injecting drugs. Within this population, younger people and those living with HIV had the highest number of HCV re-infection. Furthermore, people who inject drugs who were receiving treatment for addiction through opioid-agonist therapy had lower re-infection risk.

How can these findings be used?

In conclusion, this research shows that re-infection with hepatitis C infection is common following successful treatment. Higher number of re-infection among people who recently injected drugs suggests importance of ongoing risk activities. These findings highlight need for engagement of people who inject drugs in harm-reduction (needle syringe program, opioid agonist therapy etc.) and support services to prevent future reinfections.

What is the reference for this study?

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