

THE NATURAL HISTORY OF HCV INFECTION

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The natural history of HCV-infection includes the acute HCV infection with possibility of spontaneous clearance; the development of liver fibrosis and hepatocellular carcinoma (HCC); extrahepatic manifestations; and mortality. The main focus will be on the natural course of HCV-infection among people who inject drugs (PWID).

Clearance varies in studies between 20-40%. Factors which are associated with increased clearance are symptomatic acute infection, female gender, young age, reinfection after past clearance (both spontaneous and after treatment).

There is large inter-individual variability in development of fibrosis dependent on a long list of studied factors and probably some unknown ones. The main predictors of fibrosis will be presented, as well as the importance they have particularly for PWID.

Cross-sectional studies of samples of PWID with CHC from specialized treatment centers tend to indicate unrealistic rapid development of fibrosis, contrasting to longitudinal studies based on community cohorts, which may be more reliable. The main longitudinal studies involving PWID, and also some cross-sectional ones, will be presented. The influence of antiviral treatment will be discussed.

Extrahepatic manifestations will be discussed with reference to the latest research in this field, and some of the controversies will be pointed out.

HCV-related ESLD and HCC are important causes of liver transplantation and liver-related death among PWID, particularly with higher age.

With the increased treatment uptake and better results made possible by new generations of direct acting anti-virals (DAA), we may experience that it will be much more difficult to study the real natural course of HCV infection in the future. The main attention for future research on hepatitis C may be not so much on the natural course, but on how to avoid it.