Mortality in Hepatitis C populations – Another battle against drugs and alcohol

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In the era of efficacious and well-tolerated treatment for chronic Hepatitis C virus (HCV) infection, there is an expanding population of individuals who achieve viral eradication. This in turn has generated a need to determine the impact of liver-related morbidity and mortality, particularly liver decompensation and hepatocellular carcinoma, in populations achieving sustained viral response (SVR), and how they correlate with that of the general population.

A recent retrospective cohort study (*Innes, et al. J Hepatol. 2017;66 19-27)* sought to assess these findings in a group of over 1,800 patients with SVR and different stages of liver disease, with a follow-up period of over five years after viral eradication. Patients who had achieved SVR had almost double the mortality rate than that of the general population. This association persisted when analyzing only non-cirrhotic individuals with SVR, though to a lesser degree. Drug-related deaths and hepatocellular carcinoma were the two main contributors towards the excess mortality seen in the study population, illegal drug use accounting for 53% of excess deaths in <50 year-old patients, and hepatocellular carcinoma for 54% in the over 50s. The study also assessed the influence of modifiable risk factors, including intravenous drug use and alcohol abuse. It showed that a higher number of behavioural risk factors was strongly associated with higher mortality rates, whereas individuals not engaged in such behaviours showed a similar mortality to that of the general population.

Since direct-acting antivirals against HCV currently provide high cure rates with a very favourable adverse event profile using three months therapy (*Banerjee, et al. Ailment Pharmacol Ther.2016,43:674-96)*, the impact of modifiable health risk behaviours on the effects of such treatments and patient life expectancy remains a cause of concern. This study highlights a need to address the management of modifiable health risk behaviours as part of chronic HCV treatment. Similar to HIV prevention strategies, pharmacological interventions alone are not sufficient to maximise the potential of antiviral therapies (*Kojima, et al. AIDS.2016;30:2251-2; Midgard, et al. J Hepatol.2016;65[Suppl]:33-45)*. Due to local variability in services, there is currently no standardized approach to incorporating risk behaviour reduction into chronic HCV management. Further research should aim to ascertain the

optimum method of achieving and maintaining risk behaviour reductions, as well as assessing whether risk modification prior to initiating treatment provides significantly better long-term outcomes. Arguably, not addressing the motivations driving HCV infection in intravenous drug users limits the efficacy of antiviral therapy. Thus, behavioural interventions are crucial for making a significant impact in HCV-patients' life expectancy.

References

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