Hepatitis C, HIV and the kidneys

Another team of researchers at the Veteran's Administration (VA) in the U.S. conducted an analysis of its dataset, focusing on 23,155 HIV-positive people whose health information had been collected between October 1997 and October 2004. This second VA analysis was interested in finding associations between hepatitis C virus (HCV) infection, HIV and health outcomes such as the presence of kidney disease and survival.

Results

The study team found the following:

- About 40% of HIV-positive people were co-infected with HCV.
- More co-infected participants (14%) had kidney disease compared to people with HIV infection alone (11%).
- After an average of eight years of monitoring, 37% of participants died. Death rates increased as kidney health declined and co-infected people were less likely to survive.

Taking many factors into account, and compared to co-infected people with normal kidney function, having an eGFR less than 60—an indicator of declining kidney health—was highly linked to an increased risk of death, as follows:

- An eGFR between 59 and 30 was associated with nearly a 61% increased risk of death.
- An eGFR between 29 and 15 was linked to a 300% increased risk of death.

The whole picture

The substantially increased risk of death in HIV-HCV co-infected people as kidney health declined is striking. Researchers are not sure why chronic kidney disease amplifies the risk of death. A part of the puzzle is that the study team found that chronic kidney disease could only account for about 25% of deaths in this study. HCV infection could account for a further 25% of deaths. Although not assessed in this study, the team suspects that other factors, such as substance use and complications from a failing liver (due to HCV infection), may have been partly responsible for the unusually high death rate in this study.

The VA analysis should stimulate initiatives to improve medical care for co-infected people, specifically ensuring that they receive HAART as well as therapy for HCV infection and complications such as depression, heart and kidney disease.

REFERENCES:

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