How Does HIV Affect Hepatitis C?

HIV increases the risk for—and can speed up the development of—liver damage from hepatitis C. Other factors, such as alcohol intake, duration of hepatitis C infection, hepatitis B coinfection, being older than 40 and using certain antiretrovirals (ARVs), such as Videx or Zerit), may also worsen liver damage. People with fewer than 200 CD4 cells are more likely to have liver damage from hep C.

People who are coinfected may need to select HIV meds carefully with their care providers. Although the benefits of HIV treatment outweigh the risks, many medications used to treat HIV, including the protease inhibitors and the non-nucleoside reverse transcriptase inhibitors, are broken down (metabolized) by the liver and can cause liver injury, even in people who aren't living with hepatitis C. People taking ARVs should have their liver enzymes monitored regularly.

On the one hand, these particular drugs may worsen or speed up the liver disease being caused by hepatitis C. On the other hand, many experts think that treating HIV can delay liver disease progression by keeping the immune system strong.

Choosing HIV medications that are known to be easy on the liver and are less likely to interact with hep C treatments is the best solution. Be sure to discuss your options with your health care provider.

People who are coinfected usually have higher HCV viral loads than people with HCV alone, but—unlike HIV—hepatitis C viral load is not linked to disease progression or liver damage. Liver enzymes are not a reliable indicator of disease progression, because some people have liver damage despite persistently normal liver enzyme levels.

Even though it happens more rapidly in HIV-positive people, hepatitis C progression varies widely among individuals. Researchers have found that about 25 percent of people coinfected with HIV/HCV have rapid fibrosis progression (meaning they progress two fibrosis stages over three to four years). Some researchers have reported moderate liver damage in people coinfected with HIV/HCV within a few years of HCV infection, but this is unusual.

As the HIV population gets older thanks to successful ARV treatment, many people who are coinfected are developing cirrhosis. In general, HIV is known to double the rate of cirrhosis. Experts estimate that without HCV treatment at least 20 percent of coinfected people will develop cirrhosis 20 years after HCV infection and 40 percent to 59 percent of people will develop cirrhosis

in 30 years.

People with cirrhosis or end-stage liver disease are at high risk for drug-induced liver injury and may need to avoid—or use a different dose of—some HIV drugs.

Discontinuing HIV treatment can worsen cirrhosis in people who are coinfected. Although the three-year survival rate among HIV/HCV-coinfected people with cirrhosis is 87 percent, once liver failure (also called decompensated cirrhosis) occurs, the survival rate drops to 50 percent at two years.

In fact, end-stage liver disease from untreated, or unsuccessfully treated, hepatitis C has become a leading cause of death among people with HIV in the United States and Western Europe, where there is widespread access to ARV therapy. Compared with people who have only hepatitis C, those with both HIV and HCV are more likely to experience liver failure—which is often fatal unless a transplant is performed. In one study, people infected with both viruses were 21 times more likely to die of liver failure than those only infected with hepatitis C.

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