Focusing HIV treatment helps control concurrent hepatitis B infection

July 15 2009

Prolonged use of highly active antiretroviral therapy (HAART) to treat people infected with both HIV and hepatitis B (HBV) helps to better control the hepatitis B infection and could delay or prevent liver complications, according to a new study by researchers at Wake Forest University School of Medicine.

Researchers also found that patients who had higher levels of a common liver enzyme upon beginning treatment for HIV-HBV co-infection were at an increased risk of being diagnosed with cirrhosis within the first few years of follow-up. Cirrhosis is a disease that scars the liver, progressively shutting it down. The enzyme is one released into the bloodstream after liver damage.

"One of the most interesting findings was the confirmation that a simple marker, such as transaminase levels before treatment, is useful in identifying patients at higher risk of developing HBV-related complications in a few years," said lead researcher Marina Núñez, M.D., Ph.D., an assistant professor in the Section on Infectious Diseases, in the Department of Internal Medicine at the School of Medicine.

The study is appears in the May/June issue of *HIV Clinical Trials*, published today.

HBV is a contagious liver disease, contracted in the same way as HIV - through intravenous drug use, sexual contact or mother-to-newborn transmission. Left untreated, it can lead to fatal liver disease or liver

cancer.

HIV increases the activity of HBV, speeds the progression of related liver disease and might decrease the effectiveness of treatments for HBV.

But Núñez and Tsan Lee, a medical student at the School of Medicine, found that prolonged use of highly active antiretroviral therapy, including one or more drugs active against HBV, can lead to clearance of the HBV infection in co-infected patients. HAART is the treatment for HIV infection, consisting of a combination of drugs commonly known as the "cocktail."

For the study, researchers reviewed medical records of patients seen in an adult HIV clinic between 1990 and 2008. They included in the study all patients with positive HIV antibody, hepatitis B and at least three months of follow-up care on record.

Of the 72 patient charts reviewed - primarily black males with a median age of 39 and advanced HIV disease at the time of diagnosis - 64 of the patients received HAART that included drugs effective in treating HBV, for a median duration of one year. The researchers were looking for whether the patients were diagnosed with liver complications such as cirrhosis and liver cancer over the course of treatment, and whether the chronic HBV infection improved.

Analysis showed that receiving HAART combined with HBV treatment for a longer period of time was significantly associated with reduced and, in some cases cleared, chronic HBV infection.

Núñez said these findings "stress the importance of good control of the HIV and HBV infections through maintained compliance with HAART including drugs to treat HBV.

"In HBV-HIV patients with the elevated enzyme levels that signal liver damage, it is even more important to control the HBV infection in an attempt to decrease the risks of complications. Those patients should also be more closely screened for liver complications."

Source: Wake Forest University Baptist Medical Center (news : web)