Viramune Boosts Hep C Treatment Efficacy in People With HIV

July 20, 2010 By Tim Horn

People coinfected with HIV and hepatitis C virus (HCV) who receive Viramune (nevirapine) may respond better to pegylated interferon/ribavirin HCV treatment compared with those receiving Kaletra (lopinavir/ritonavir), according to a retrospective study reported Tuesday, July 20, at the XVIII International AIDS Conference in Vienna.

It is known that some nucleoside reverse transcriptase inhibitors—such as didanosine (Videx EC), zidovudine (found in Retrovir, Combivir and Trizivir) and abacavir (found in Ziagen, Epzicom and Trizivir)—may decrease the efficacy and tolerability of HCV therapy. This is likely due to different interactions and toxicities, explained Jose Mira, MD, of the Hospital Universitario de Valme in Seville, Spain.

The information about whether protease inhibitors and non-nucleoside reverse transcriptase inhibitors influence sustained virologic responses (SVRs) to HCV therapy—defined as undetectable HCV levels six months after discontinuing treatment—among coinfected patients is limited and contradictory.

According to Mira, the use of protease inhibitors during HCV therapy led to a worse rate of response to pegylated interferon/ribavirin—the standard treatment for HCV—in a previous clinical trial. However, this association was not found in other studies performed in populations of coinfected patients.

It has also been reported that patients receiving Viramune-based antiretroviral (ARV) therapy show lower HCV viral loads than those treated with regimens containing a protease inhibitor or Sustiva (efavirenz). This finding, Mira added, could have a positive influence on the response to HCV therapy among individuals taking Viramune.

Based on these observations, Mira's group decided to compare the efficacy of pegylated interferon/ribavirin among HIV/HCV-coinfected patients taking either Viramune- or Kaletra-based ARV regimens. This wasn't an actual clinical trial, but rather a retrospective review of coinfected patients taking either ARV, along with pegylated interferon and ribavirin, at one of 20 hospitals throughout Spain.

The review included 165 patients, averaging 42 years old. Seventy-one patients were treated with Viramune, and 94 were treated with Kaletra.

It's important to note that there were imbalances in the study population. The proportion of patients who were either male or had advanced liver fibrosis or cirrhosis was higher among individuals who took Kaletra. On the other hand, the percentage of patients with low levels of pre-HCV treatment viral loads was greater in the Viramune group.

In the strict intention-to-treat analysis, 56 percent of patients treated with Viramune experienced SVRs, compared with 37 percent of those receiving Kaletra. Among those with HCV genotypes 1 and 4—the most difficult to treat forms of HCV—the results were 43 versus 25 percent, respectively. Among those with easier to treat genotypes 2 and 3, the results were 78 versus 59 percent, respectively. These differences, Mira reported, were statistically significant, meaning they were all too great to have occurred by chance.

Eight percent of the patients in the Viramune group, compared with 23 percent of patients in the Kaletra group, were HCV treatment non-responders. This difference was statistically significant.

However, the differences in the rates of relapse, HCV viral load breakthrough, discontinuations due to adverse events and voluntary dropout were similar in both groups.

Because both groups were different regarding baseline HCV viral loads and fibrosis state, Mira's group analyzed SVR rates by stratifying the population according to these important parameters. Among patients with high HCV viral loads (600,000 copies or greater), 58 percent of those who were receiving Viramune, compared with 31 percent of those taking Kaletra, experienced an SVR. Among patients with advanced fibrosis (a score of F3 or F4), 60 percent of the subjects in the Viramune group, compared with 36 percent of patients in the Kaletra group, achieved an SVR.

Upon analyzing the data for the specific factors associated with an SVR, the following were found to be positive variables: HCV genotype 2 or 3, use of ARV therapy including Viramune, and greater than 80 percent adherence to HCV treatment.

In conclusion, Mira stressed that controlled clinical trials are warranted to confirm the positive effects of Viramune on the efficacy of HCV therapy in people living with HIV.