Longer Hep C Treatment Improves Response in People Coinfected With HIV

November 1, 2010

People coinfected with both HIV and hepatitis C virus (HCV) who fail to respond rapidly to HCV treatment are more likely to achieve a cure for their HCV if they extend their treatment by at least six months. These data were presented at the American Association for the Study of Liver Diseases being held October 29 to November 2 in Boston.

Treatment for hepatitis C has both benefits and disadvantages. When it works well—called a sustained virological response (SVR) and defined as achieving and maintaining undetectable HCV levels for at least six months after completing a course of treatment—it cures people of their infection. The treatments can be quite toxic, however, and they must be taken for at least six months. Moreover, they frequently fail to work for people infected with genotypes 1 and 4, especially in people infected with both HIV and HCV.

The current recommended course of HCV treatment in coinfected individuals, which consists of pegylated interferon combined with ribavirin, is 48 weeks. Generally, about 40 to 50 percent of people with genotypes 2 or 3, and about 25 to 30 percent of people with genotypes 1 and 4, achieve an SVR. Recent research has found that people who have a rapid virological response (RVR), which is an undetectable HCV level four weeks after starting treatment, are far more likely to have an SVR after completing treatment.

To determine the likelihood of achieving an SVR, based on a person's rapid response, and to determine whether adding an additional three or more months of HCV treatment would help boost treatment responses in people who failed to control their HCV well in the first few weeks of therapy, Pablo Barreiro and his colleagues enrolled 185 HIV and HCV coinfected people into the EXTENT study. Six possible courses of treatment were available to participants, depending on their genotype, their RVR and their virological response at 12 weeks.

In people who achieved an RVR, those with genotypes 2 or 3 continued HCV treatment for a total of six months, while those with genotypes 1 or 4 continued treatment for one year.

People who failed to achieve an RVR, and who had less than a 2 log drop in HCV levels by week 12, stopped treatment regardless of their HCV genotype.

People who failed to achieve an RVR, but who did see a 2 log or greater drop at week 12 continued on until the six month point, when their HCV levels were tested again. Those who still had measurable HCV levels stopped treatment. Those who had undetectable HCV levels either remained on therapy for a total of 48 weeks (genotypes 2 or 3) or 72 weeks (genotypes 1 or 4).

The EXTENT study had several notable findings. First, a rapid virological response significantly predicted the likelihood of curing a person's hepatitis. In those with genotypes 2 or 3, a full 66 percent achieved an SVR after just six months of treatment, and 65 percent of those with genotypes 1 or 4 achieved an SVR after 12 months of treatment. In the genotype 1 or 4 group, this represents a nearly 250 percent increase in efficacy over standard cure rates for such individuals.

Second, an additional length of treatment helped improve cure rates in people who initially failed to achieve an RVR. Seventy-seven percent of those with genotypes 2 or 3 achieved an SVR with the longer 48-week duration of treatment, while 62 percent of those with genotypes 1 or 4 achieved an SVR after 72 weeks of treatment.

In contrast, the standard treatment duration worked miserably in people who initially failed to control virus at four weeks. Just 17 percent of those with genotypes 2 or 3 achieved an SVR after six months of treatment, and only 9 percent of those with genotypes 1 or 4 had an SVR after the standard 12 months of therapy.

These data offer hope and guidance to people coinfected with HIV and HCV who cannot wait for newer HCV therapies to become available and who must decide whether to start HCV treatment and how long to take it.
