Experimental drug may work against hepatitis C

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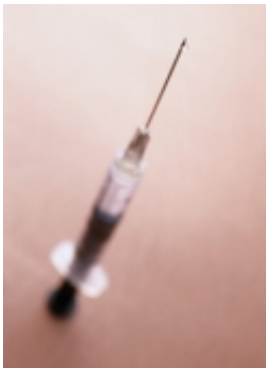

Miravirsen greatly reduced virus in patients in small study.

(HealthDay)—An experimental therapy for hepatitis C—a "silent killer" linked to liver cancer and cirrhosis—has shown promise in tamping down virus levels in early trials.

Experts caution, however, that it's too soon to know if the injectable drug will someday gain a standing among emerging oral medications against the disease.

New research suggests that the drug, miravirsen, could potentially be part of a drug "cocktail" that manages the hepatitis C virus in much the same way as similar combinations have transformed HIV/AIDS from a death sentence into a chronic, manageable condition.

Miravirsen suppresses molecules the hepatitis C virus needs to reproduce. The drug decreased viral loads by about 500-fold at the highest doses used in a small, phase 2 study by an international group of researchers. Drug resistance, a common problem with other hepatitis C medications, did not develop among patients taking miravirsen.

A phase 2 trial evaluates a drug's effectiveness while continuing to assess its safety.

"This is the first real clinical study of this approach and the results are encouraging," said Dr. Judy Lieberman, chairwoman of cellular and molecular medicine at Boston Children's Hospital. "What's exciting to me is that there doesn't seem to be any drug resistance developing. If there's a way to develop a drug cocktail that doesn't require a half a year of treatment ... that would be really exciting, but it's too early to tell."

Lieberman was not involved in the research but co-wrote an editorial accompanying the new study in the March 27 issue of the *New England Journal of Medicine.*

Hepatitis C is one form of liver disease and affects about 170 million people worldwide, according to study background information. It's transmitted by shared needles or, less frequently, through sex. Often symptomless, the infection is a major cause of liver cancer and cirrhosis, or scarring of the liver.

Led by Dr. Harry Janssen, a professor of medicine at the University of Toronto and Erasmus University Rotterdam in the Netherlands, researchers split 36 patients with hepatitis C into four groups. Nine patients in each of the first three groups received a dose of either 3 milligrams (mg), 5 mg or 7 mg of miravirsen per kilogram of body weight for 29 days, while the last nine patients received a placebo. All were followed for 18 weeks.

The so-called viral load of patients receiving the highest dose decreased by about 500-fold, Lieberman said, and the hepatitis C virus was below detectable levels in four of nine patients. Meanwhile, the treatment caused no significant toxic effects in any patients, aside from mild injection-site reactions and a brief increase in liver enzyme levels.

Calling the study "interesting," Dr. David Bernstein, chief of the division of hepatology at North Shore University Hospital in Manhasset, N.Y., said that as an injectable drug, miravirsen would be less desirable among patients than other new drugs for hepatitis C that can be taken orally.

"It's a novel concept, but it's only 36 patients and a phase 2 study," Bernstein said. "It's impressive that their viral loads came down, but most suffered a recurrence of the virus."

More information: The U.S. Centers for Disease Control and Prevention has more about hepatitis C.