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New treatment for hepatitis C

Researchers at the University of Oklahoma Health Sciences Center have found a new use for an old drug. Their findings appear online in the *American Journal of Gastroenterology*.

The drug, Fluvastatin, has been approved since 1993 by the U.S. Food and Drug Administration for the treatment of elevated cholesterol in adults. Millions of patients have taken Fluvastatin for cholesterol without difficulty.

In a study of 31 veterans at the Veteran's Administration Medical Center in Oklahoma City, researchers found that Fluvastatin significantly lowered the viral load, or levels of hepatitis C virus, for up to six weeks when used alone. Hepatitis C is the disease that claimed the life of Oklahoma and Yankee baseball great Mickey Mantle.

"This research is the first to demonstrate the antiviral activity of Fluvastatin in human beings infected with hepatitis C, most of whom were non-responders to the standard of care treatment," said Ted Bader, M.D., the principle investigator on the project and the director of liver diseases at the OU Health Sciences Center.

Since Fluvastatin will not completely clear the hepatitis C virus by itself, researchers have started a phase II randomized, controlled trial that combines Fluvastatin with the standard treatment of peg-interferon and ribavirin. They hope to use the combination of medicines to significantly improve the cure rate for hepatitis C. After further required testing and approval, the drug could be available as a new treatment for hepatitis C far sooner than any other anti-hepatitis C drug currently under research and development.

"We need additional drugs to add to this regimen to improve the cure rate," Bader said. "When patients are cured, they feel dramatically better, their health care costs plummet, their risk of liver cancer drops dramatically, and if they do not have cirrhosis, they will not need a liver transplant. Moreover, they are no longer infectious."

In the initial investigative study funded by the VA Research Foundation of Oklahoma City and Dr. Michael Bronze at the University of Oklahoma College of Medicine, veterans with chronic HCV were given oral doses of Fluvastatin daily for two to 12 weeks. Within a month, half of the patients showed a reduction of the virus. One patient's viral load was about 50 times lower than before taking Fluvastatin.

Hepatitis C is a significant problem for Oklahoma. More than 80,000 Oklahomans have chronic hepatitis C (HCV), but less than 5 percent have been treated. HCV is the leading cause of liver-related deaths in our state

and also is the cause for the majority of the 70 liver transplants performed in Oklahoma each year.

Nationwide, 2 percent of Americans (about 4 million) are infected with chronic hepatitis C, which is four times the number of patients infected with HIV. Chronic hepatitis C is often asymptomatic and can lead to progressive liver disease.

Most people with hepatitis C contracted the disease through blood transfusions before 1992 when a test was implemented to screen for the disease. You also can get the virus by injecting drugs with contaminated needles and, less commonly, from contaminated needles used in tattooing and body piercing.

Source: University of Oklahoma