

Study indicates cancer preventive effect for statins

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The commonly used prescription statin drugs may have a protective effect in the prevention of liver cancer and lead to a reduction in the need for gallbladder removals, according to two studies published in *Gastroenterology*. As millions of Americans use statins each day to help lower their cholesterol and risk of heart disease, researchers are learning of the beneficial effects these drugs may have on gastrointestinal disorders. *Gastroenterology* is the official journal of the American Gastroenterological Association (AGA) Institute.

Statins Benefit Diabetics at High Risk of HCC

Statin use is associated with a significant reduction in the risk of hepatocellular carcinoma (HCC), or [liver cancer](#), among patients with diabetes, according to a new study in *Gastroenterology*.

"Our study provides the first indication of a cancer preventive effect for statins specific to HCC," said Hashem B. El-Serag, MD, MPH, of the Baylor College of Medicine and lead author of the study. "While these findings need to be confirmed in future studies, we are hopeful that further research continues to show the beneficial effect of statins for liver [cancer prevention](#) in patients with diabetes."

HCC is a highly fatal malignancy that has been increasing in several regions of the world, including the U.S. Experimental as well as indirect human data suggests that statins exert a beneficial action, reducing the progression of HCC.

Researchers undertook an epidemiological study in a large cohort of diabetics, whose risk of HCC was higher than average, to characterize the relationship between statin use and HCC and other [liver disease](#). The team examined 1,303 cases and 5,212 controls; the mean age was 72 years. Ninety-nine percent were men and 13 percent were African Americans. A significantly smaller proportion of cases (34.3 percent) had at least one

filled prescription for statins than controls (53.1 percent).

The research team found a significant inverse association between having statin prescriptions filled and the risk of developing HCC. There was a trend toward stronger risk reduction with longer and more frequent statin prescriptions. The risk reduction observed with statins ranged between 25 percent and 40 percent. Reduced HCC risk was similar, whether the prescriptions were for simvastatin or any other statin dispensed.

Statins May Reduce Risk of Gallbladder Removal Surgery

The use of statins appears to reduce the risk of cholecystectomy, surgical removal of the gallbladder, in women, according to a new study in *Gastroenterology*.

Gallstone disease is a common abdominal condition in developed countries and is a major cause of digestive disease leading to hospital admissions. In the U.S., more than 800,000 cholecystectomies are performed each year.

Researchers examined the relationship between statin use and the risk of cholecystectomy in a cohort of U.S. women participating in the prospective Nurses' Health Study. Participants biennially reported their health history, including incidence of gallstone disease and whether they had undergone cholecystectomy.

Researchers conducted a retrospective analysis of statin use through data collected in 2000 to define use from 1994 forward, and a prospective analysis for general lipid-lowering drugs from 1994 to 2004. In the statin analysis, the researchers ascertained 2,479 cases of cholecystectomy during 305,197 person-years of follow-up. The multivariate relative risk for current statin users, compared with nonusers, was 18 percent. In the analysis of

general cholesterol-lowering drugs, researchers ascertained 3,420 cases of cholecystectomy during 511,411 person-years of follow-up. Compared with nonusers, the multivariate relative risk for current users of general cholesterol-lowering drugs, mostly statins in this cohort, was 12 percent. Among diabetic women, duration of current statin use was correlated with risk of cholecystectomy. Compared with statin nonuse, the relative risk for current statin use of two or more years was 75 percent.

"Further study, particularly among diabetics, is warranted to evaluate the associations of longer durations of statin use and specific types of statins with risk," said Chung-Jyi Tsai, MD, of the University of Kentucky Medical Center and lead author of the study. "Our results should have implications for additional clinical, epidemiological and mechanistic research."

Source: American Gastroenterological Association
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