

Elevated cholesterol and triglycerides may increase the risk for prostate cancer recurrence

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Higher levels of total cholesterol and triglycerides, two types of fat, in the blood of men who underwent surgery for prostate cancer, were associated with increased risk for disease recurrence, according to a study published in *Cancer Epidemiology, Biomarkers & Prevention*, a journal of the American Association for Cancer Research.

"While laboratory studies support an important role for cholesterol in [prostate cancer](#), population-based evidence linking cholesterol and prostate cancer is mixed," said Emma Allott, PhD, postdoctoral associate at Duke University School of Medicine in Durham, North Carolina.

"Understanding associations between obesity, cholesterol, and prostate cancer is important given that cholesterol levels are readily modifiable with diet and/or statin use, and could therefore have important, practical implications for prostate cancer prevention and treatment.

"Our findings suggest that normalization, or even partial normalization, of serum lipid levels among men with dyslipidemia [abnormal lipid profile] may reduce the risk of prostate cancer recurrence," said Allott.

Allott, Stephen Freedland, MD, associate professor of surgery at Duke University School of Medicine, and colleagues, analyzed data from 843 men who underwent radical prostatectomy after a prostate cancer diagnosis and who never took statins before surgery. They found that those who had serum triglyceride levels of 150 mg/dL or higher had a 35

percent increased risk for prostate cancer recurrence, when compared with patients who had normal levels of [triglycerides](#). Among those with abnormal [blood](#) lipid profile, for every 10 mg/dL increase in total serum cholesterol above 200 mg/dL, there was a 9 percent increased risk for prostate cancer recurrence.

For every 10 mg/dL increase in high density lipoprotein (HDL; known as "good" cholesterol) among men with abnormal HDL (below the desirable value of 40 mg/dL), the risk for prostate cancer recurrence was lowered by 39 percent.

"Given that 45 percent of deaths worldwide can be attributed to cardiovascular disease and cancer, with prostate cancer being the second most common cause of male cancer deaths in the United States, understanding the role of dyslipidemia as a shared, modifiable risk factor for both of these common causes of mortality is of great importance," she added.

Study subjects were identified from the Shared Equal Access Regional Cancer Hospital (SEARCH) database and treated at one of the six Veterans Affairs Medical Centers in California, North Carolina, and Georgia.

Of the 843 men studied, 343 were black, 325 had abnormal cholesterol levels, 263 had abnormal triglyceride levels, and 293 had a biochemical recurrence, defined as rising PSA levels after prostate cancer treatment, indicating the recurrence of the patient's prostate cancer.

Provided by American Association for Cancer Research

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