

Smoking Linked to Higher Risk of Death among Colorectal Cancer Survivors

American Cancer Society Study Is One of Largest to Date on Smoking and Colorectal Cancer

ATLANTA –Feb 2, 2015– Colorectal cancer survivors who smoke cigarettes were at more than twice the risk of death than non-smoking survivors, adding to existing evidence that cigarette smoking is associated with higher all-cause and colorectal cancer-specific mortality. The findings come from a new study by American Cancer Society researchers, one of the largest studies of smoking and colorectal cancer survival and the first study to prospectively collect both pre- and post-diagnosis smoking information. It is [published early online](#) in the *Journal of Clinical Oncology*.

Existing evidence links smoking with higher chances of being diagnosed with colorectal cancer, but its association with survival after colorectal cancer diagnosis is unclear. To investigate the association of smoking, before and after diagnosis, with all-cause and colorectal cancer-specific mortality among colorectal cancer survivors, researchers led by Dr. Peter Campbell identified 2,548 people newly diagnosed with invasive, non-metastatic colorectal cancer from among 184,000 adults in the American Cancer Society's Cancer Prevention Study II. Among the 2,548 colorectal cancer survivors, 1,074 died during an average of 7.5 years of follow-up time, including 453 as a result of colorectal cancer.

The researchers found those who were smokers before diagnosis had more than twice the risk of death from all causes (relative risk [RR] = 2.12) as well as from risk of dying of colorectal cancer (RR, 2.14). Former smoking before diagnosis was associated with higher all-cause mortality (RR, 1.18) but not with colorectal cancer-specific mortality. Smoking after diagnosis was also associated with more than double the risk of overall mortality (RR, 2.22) over the course of the study, and was associated with nearly twice the risk of colorectal cancer-specific mortality (RR, 1.92).

The authors say it is plausible that smokers have pathologically more-aggressive tumors, or that smoking may decrease the efficacy of colorectal cancer treatment. "Further research is needed to understand mechanisms whereby smoking may increase colorectal cancer-specific mortality and determine if quitting smoking after diagnosis lowers the risk of colorectal cancer-specific mortality," the authors conclude.

Citation: [Active Smoking and Mortality Among Colorectal Cancer Survivors: The Cancer Prevention Study II Nutrition Cohort](#). Baiyu Yang, Eric J. Jacobs, Susan M. Gapstur, Victoria Stevens, and Peter T. Campbell. JCO published online on February 2, 2015; DOI:10.1200/JCO.2014.58.3831
