Regular Aspirin Use May Lower Colorectal Cancer Risk

But this benefit applied only to those individuals who initiated aspirin use at an earlier age.

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Frequent use of aspirin by people at least 70 years of age was linked to a lower risk of colorectal cancer compared with people who used aspirin more infrequently. However, this association was seen only among people who first used aspirin at an earlier age, according to findings reported in JAMA Oncology.

Presently, aspirin is recommended as a means of preventing colorectal cancer for adults between 50 and 59 years old. “There is considerable evidence that aspirin can prevent colorectal cancer in adults between 50 and 70 years old,” Andrew T. Chan, MD, MPH, of Massachusetts General Hospital in Boston, said in a press release. “But it has not been clear whether the effect is similar in older adults.”

Studies of aspirin use and cancer have produced mixed results. One recent study found that people who used aspirin long-term prior to their cancer diagnosis were less likely to die of colorectal cancer. Other research has shown that aspirin reduces the risk of liver cancer. But in another recent study, aspirin use was actually associated with a greater risk of cancer overall in older individuals.

Chan and colleagues carried out a pooled analysis of two cohort studies to explore any links between aspirin use and the risk of colorectal cancer in older adults.

The team analyzed data from the Nurses’ Health Study (June 1980 through June 2014) and the Health Professionals Follow-Up Study (January 1986 through January 2014), which included 94,540 individuals who were at least 70 years old. Of the total participants, 67,223 (71%) were women, and a majority of the women (97%) and the men (96%) were white.

The team found that regular aspirin use was associated with a lower risk of colorectal cancer among people who were at least 70 years old. But this benefit applied only to people who had begun taking aspirin before age 70. For people age 70 and older, initiating aspirin use was not particularly beneficial.

Regular aspirin users were more likely to be older, to be current or past smokers, to have

hypertension, diabetes or abnormal blood lipids and to have undergone a colonoscopy in comparison with people who did not frequently use aspirin. The team's findings remained consistent even after adjusting for hypertension, abnormal blood lipids, cardiovascular disease and the use of drugs to lower cholesterol. Further, among early users of aspirin, a lower colorectal cancer risk was seen even after adjusting for the duration of aspirin use before age 70.

An earlier study, Aspirin in Reducing Events in the Elderly found that a daily low dose of aspirin over five years among people older than 70 greatly increased the risk of death from cancer. But most of these individuals had rarely taken aspirin prior to their participation in the study. Further, the risk of serious gastrointestinal bleeding—a potential side effect of aspirin—was quite high among this group.

"As people get older, if they are not already taking aspirin, a discussion is warranted about whether to start aspirin after weighing the benefits against the risks," said Chan.

Aspirin use alone cannot be considered a way to "meaningfully reduce the incidence and mortality attributable to [colorectal cancer]," Brooks Cash, MD, of the University of Texas Health Science Center in Houston, who was not involved in this study, told MedPage Today. Aspirin's small cancer-prevention benefit should be accompanied by a better diet, smoking cessation and following recommended screening guidelines.

Given that most participants in this study were white, these findings cannot be generalized to the larger population. "Several non-Caucasian ethnicities have been shown to have an increased risk of [colorectal cancer], and we do not know the effects of regular aspirin use in these different patient groups," said Cash.

Click here to read the study in JAMA Oncology.

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