



Antacid Use Not Linked to Colorectal Cancer

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Although long-term use of proton pump inhibitors (PPI) has been linked to hypergastrinemia and this metabolic disturbance has, in turn, been tied to colorectal cancer, chronic PPI use does not seem to raise the risk of colorectal cancer, according to the findings of two studies in the September issue of *Gastroenterology*.

"We were somewhat surprised by the negative association because previous experimental evidence, particularly data from the Min mouse model, seems to suggest that there could be a positive association," Dr. Yu-Xiao Yang, lead author of one study, told Reuters Health.

Dr. Yang, a gastroenterologist at the University of Pennsylvania in Philadelphia, said that "the negative finding may be related to the limited extent of hypergastrinemia induced by the usual therapeutic dose of PPI used in the general population, compared to the gastrin levels seen in experimental studies. Another reason might be that the type of gastrin produced by the stomach in response to acid suppression may be a relatively less potent growth promoter than the other types of gastrin studied in previous experimental studies."

The findings are based on analysis of data from the General Practice Research Database (1987-2002) in the UK. Included in the study were 4432 incident colorectal cancer cases and 44,292 matched controls. All of the subjects were at least 50 years of age and had been cancer-free during the first 5 or more years of follow-up.

Exposure to a proton pump inhibitor for 5 years or longer did not raise the risk of colorectal cancer in the overall analysis. In high-dose PPI users (1.5 or more defined daily doses/day), however, there was a nonsignificant trend toward an elevated risk with increasing PPI use. No increased risk was noted in patients with pernicious anemia.

Practicing physicians should be aware that "long-term PPI therapy at regular doses is not associated with a significantly increased risk of colorectal cancer," Dr. Yang emphasized. "We could not completely exclude an increased risk associated with long-term PPI use at high doses or with PPI therapy durations much longer than 10 years. So, physicians should always use the lowest effective dose when administering PPI therapy."

In a similar study based on Danish data, Dr. Douglas J. Robertson, from the VA Medical Center in White River Junction, Vermont, and colleagues found no evidence that PPI use raises the risk of colorectal cancer. In the study, which involved 5589 case patients and 55,890 controls, even intense use of PPIs (more than every other day) did not increase the risk.

Dr. Yang said that as data become available in the coming years, it should become clear whether long-term use of PPIs raises the risk of colorectal cancer.