

Proton Pump Inhibitors Don't Appear to Influence Colorectal Cancer Risk

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Exposure to proton pump inhibitors (PPIs) does not appear to increase the risk of colorectal cancer, according to a report in the April issue of the American Journal of Gastroenterology.

"Our study did not show an association between PPI use and colorectal cancer," Eva M. van Soest from Erasmus University Medical Center, Rotterdam, the Netherlands told Reuters Health.

"Careful monitoring seems wise, and studies should be repeated when longer follow-up is available."

In a case-control population study conducted between 1996 and 2005, Dr. van Soest and associates investigated the association between the use of PPIs and the risk of colorectal cancer in 457,024 subjects, calculating for the overall presence of colorectal cancer and separately for colorectal cancer in the right and left hemicolon.

The odds of colorectal cancer did not increase among patients who had ever used PPIs compared with those who had not, the authors report, and there was no duration-effect or dose-dependent relationship between PPI use and colorectal cancer risk.

Out of the 595 patients who developed colorectal cancer, the authors noted no increased risk among those who were taking a PPI and those who were not.

The use of PPIs was not associated with a greater risk of colorectal cancer when the right and left hemicolon were analyzed separately, the report indicates.

The risk of colorectal cancer was significantly increased in patients with inflammatory bowel disease and a higher degree of comorbidity but not in patients with a positive *Helicobacter pylori* status.

"Although there might be biological plausibility for an association between PPI use and colorectal cancer, we did not expect to see a large effect since patients with profound hypergastrinemia due to other reasons (Zollinger Ellison or pernicious anemia, for example) have not been shown to be at increased risk of colorectal cancer," van Soest explained. "In our study we did not see an increased risk for left-sided colorectal cancer, indicating that PPI-induced hypergastrinemia is indeed not a major factor in colorectal cancer pathogenesis."

"Although every study including ours has some weaknesses," Dr. van Soest added, "two other recently published studies did not find an increased risk of colorectal cancer with PPI use either." "The results of this study therefore dispute an increased risk of colorectal cancer among PPI users of more than 50%," the investigators say. "Studies including a larger number of patients with prolonged PPI exposure are needed to draw sound conclusions about the risk of colorectal cancer associated with long-term PPI use."