

New Evidence That Colonoscopy Reduces Cancer Risk, Mortality

Pam Harrison | October 23, 2014

PHILADELPHIA — Colonoscopy reduces cancer risk and mortality in patients with inflammatory bowel disease, according to the largest study of its kind, presented here at the American College of Gastroenterology (ACG) 2014 Annual Scientific Meeting.

"Initially, when colonoscopy was adopted and approved, there were no clear data that it reduced incidence or mortality from colorectal cancer, either in the general population or in those with inflammatory bowel disease," said Ashwin Ananthakrishnan, MD, from Harvard Medical School in Boston.

However, "a lot of patients are diagnosed in their 20s, and if they are getting a colonoscopy every 2 to 3 years, as recommended, that's a lot of colonoscopies over a lifetime," he told *Medscape Medical News*.

Current guidelines recommend that patients with inflammatory bowel disease undergo colonoscopy 8 to 10 years after their initial diagnosis, and every 2 to 3 years after the initial exam.

For their study, Dr Ananthakrishnan and colleagues identified 24,000 patients with ulcerative colitis or Crohn's disease from a multi-institutional electronic medical record cohort. Of these patients, 6823 had a validated diagnosis of inflammatory bowel disease.

Investigators classified these patients into two groups: 2764 had a recent colonoscopy — in the 36 months before the diagnosis of colorectal cancer or before the end of the 8-year follow-up period; and 4059 did not.

During the follow-up period, 154 patients developed colorectal cancer. Patients diagnosed with colorectal cancer were older, more likely to be male, and more likely to have a diagnosis of ulcerative colitis or primary sclerosing cholangitis.

However, there was a clear association between colonoscopy and colorectal cancer. During the follow-up period, the incidence of colorectal cancer was significantly lower in those who had a recent colonoscopy than in those who had not (1.6% vs 2.7%; $P < .001$), Dr Ananthakrishnan reported.

Guidelines Confirmed

In an unadjusted model, a recent colonoscopy reduced the risk of developing cancer by 44%, compared with no recent colonoscopy (odds ratio [OR], 0.56); in a fully adjusted model, recent colonoscopy reduced the risk by 35% (OR, 0.65).

For patients who developed colorectal cancer, the mortality rate was lower in those who had a recent colonoscopy than in those who had not (14% vs 34%; $P = .012$). The difference was "pretty striking," Dr Ananthakrishnan noted.

Unfortunately, the investigators were not able to confirm that this reduction in mortality was related to the fact that lesions identified during the procedure were early stage and more amenable to treatment. "We could not look at this directly," he pointed out, "but I think there are enough data to support this possibility."

It is also noteworthy that colorectal cancer rates are coming down, not only in the general population in the United States, but also in individuals with inflammatory bowel disease.

"If you look at data from the 1970s and 1980s, you would expect about a 20% colon cancer rate 30 years after diagnosis," Dr Ananthkrishnan explained. However, "right now, we think the rate is about half that. So what might have been a cost-effective and beneficial procedure back in the 70s and 80s may no longer be cost-effective and beneficial. That was another reason to do this study — to see if current data still support the recommendations."

It is well known that certain populations are at higher risk for colorectal cancer, although this risk depends on the longevity and the extent of disease involved, explained Paresh Mehta, MD, from Gastroenterology Consultants of San Antonio.

"I think this is an important study because it confirms that we should continue to practice according to the guidelines," he told *Medscape Medical News*. "I will continue to follow the ACG recommendations for colorectal cancer surveillance of patients with colitis, which are based on the length of time they've had the disease and the total amount of their colon that has been affected."

Dr Ananthkrishnan and Dr Mehta have disclosed no relevant financial relationships.

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