

Colonoscopy Lowers Ca Risk on Left Side Only

VITALS

Major Finding: Adults undergoing screening colonoscopy within 10 years of a previous colonoscopy had a significantly lower risk of having a left-sided advanced neoplasm detected, but their risk of right-sided neoplasms was not reduced.

Data Source: A population-based study of 3,287 adults aged 55 and older presenting for a screening colonoscopy at 33 German gastroenterology practices between May 1, 2005, and Dec. 31, 2007.

Disclosures: Study partly supported by the Central Research Institute of Ambulatory Health Care in Germany (Berlin).

BY ELIZABETH MEHCATIE

The risk of left-sided advanced colorectal neoplasms was reduced by 67% within 10 years of having a screening colonoscopy, but there was no reduction in risk of right-sided neoplasms in a German community-based study of more than 3,000 people.

"Although a strong protective effect of colonoscopy from colorectal neoplasms has been established through previous studies, our results add to the evidence that this effect is much stronger in, if not confined to, the left colon and rectum, at least in the community setting," concluded Dr. Hermann Brenner and his associates of the division of clinical epidemiology and aging research at the German Cancer Research Center, Heidelberg.

The lack of an effect in the right colon could "be overcome to some extent by enhanced training of endoscopists, by enhanced measures of quality assurance, and by development of technology that enhances inspection of the right colon," they added (*J. Natl. Cancer Inst.* 2009;102:1-7).

The study included 3,287 people older than 55 years undergoing a screening colonoscopy at 33 gastroenterology practices in Saarland (Germany) between May 1, 2005, and Dec. 31, 2007. The researchers compared the prevalence of colorectal cancer and advanced adenomas (combined as "advanced colorectal neoplasm") among those who reported

having had a colonoscopy within the previous decade to the prevalence among those who said they had not had a colonoscopy previously.

An advanced colorectal neoplasm was found in 308 of the 2,701 participants (11.4%) who had not had a colonoscopy previously, compared with 36 of the 586 participants (6.1%) who had had a colonoscopy 1-10 years earlier. One case of colorectal cancer occurred in those who had undergone

colonoscopy, and 41 cases in those who had not.

After adjusting for age, sex, and family history of colorectal cancer, the prevalence ratio of colorectal cancer was 0.52 overall. "However, in site-specific analyses, previous colonoscopy was strongly and inversely associated with prevalence of advanced neoplasia in the left-sided colon and rectum but not with prevalence of advanced neoplasia in the right-sided colon," they reported.

The adjusted prevalence ratios were as follows: 0.99 for the cecum and ascending colon, 1.21 for the hepatic flexure and transverse colon, 0.36 for the splenic flexure and descending colon, 0.29 for the sigmoid colon, and 0.07 for the rectum.

Possible reasons for the lack of an effect of previous colonoscopy on the prevalence of right-sided neoplasms include incomplete colonoscopies or worse bowel preparation in the right colon, which could result in some missed right-sided adenomas, the authors suggested. There also could be a higher proportion of adenomas in the right colon that are sessile and flat, compared with the proportion in the left colon and rectum, they added, noting that these adenomas are easier to miss and more difficult to remove.

The authors pointed out that their results were similar to the odds ratio of deaths in a community-based study in Canada that used administrative claims data (*Ann. Intern. Med.* 2009;150:1-8). In this study, having a colonoscopy within

6 months of a diagnosis was associated with about a 40% lower risk of colorectal cancer mortality. This benefit also was "restricted essentially to left-sided colorectal cancers."

In an accompanying editorial, the lead author of that study, Dr. Nancy Baxter of St. Michael's Hospital, Toronto, referred to some limitations of the German study,

but pointed out that the results were "remarkably consistent with a number of recently published studies, all of which demonstrate the overall effectiveness of colonoscopy for reducing colorectal cancer incidence and mortality, but with a marked variance in effectiveness for proximal and distal cancers" (*J. Natl. Cancer Inst.* 2009;102:70-1).

Results Are Cause for Concern

We must be concerned about these results because studies in several settings have reported that protection from colonoscopy in the right colon is not as good as it is in the left colon, and we don't understand the reasons.

A study of the California MediCal population, the only one done in the United States, showed the same trend, but differed from the German and Canadian studies in that there was still some protection in the right colon (about 60% in men; only about 20% in women).

There are two categories of explanations for poor right colon protection from colonoscopy. One is that differing biologic factors between right and left colon cancers prevent us from achieving effective cancer prevention. The second category of explanations involves technical issues in colonoscopy performance that may affect right colon detection, including failed cecal intubation, poor preparation (which affects the right colon preferentially), and flat lesions and serrated polyps, both of which are more common in the right colon and easier to miss at colonoscopy, compared with traditional adenomas.

We can probably correct a significant portion of this problem by im-

proving colonoscopy performance. First, everyone should use split-dose bowel preparations. There are now 10 randomized, controlled trials showing that splitting the prep—giving half of it on the day of the pro-

cedure—improves the preparation in the ascending colon. Second, we need all colonoscopists to photodocument the cecum. Finally, increased awareness and perhaps special training are needed to improve detection of flat and serrated polyps.

We have a lot of information that adenoma detection is operator-dependent and varies dramatically between endoscopists. Colonoscopists should now be measuring their adenoma detection rates. We also need to figure out what serrated lesion detection rates should be over the next few years and institute quality indicators for this end point. We must reduce the operator dependency of colonoscopy. It's a flaw in the strategy when a procedure that is so important for prevention of a common cancer is operator dependent.

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MY TAKE

Arsenic Found in Morning Sickness Remedy

BY ELIZABETH MEHCATIE

A product called Nzu that is used to treat morning sickness contains high levels of arsenic and lead and should not be used by pregnant or breastfeeding women, the Food and Drug Administration warned in a statement posted on the agency's MedWatch site.

Nzu, a traditional remedy for morning sickness, is sold at African specialty stores and is also called Calabash clay, Calabar stone, Mabele, Argile, and La Craie. "It generally resembles balls of clay or mud and is usually sold in small plastic bags with

a handwritten label identifying it as 'Nzu' or 'Salted Nzu,' " the statement said.

Lead exposure can harm the brain and nervous system of developing children. Long-term exposure to arsenic, a carcinogen, has been linked with bladder, lung, and skin cancer, according to the agency.

The high levels of arsenic and lead were detected in laboratory tests performed by the Texas Department of State Health Services (DSHS), which issued a warning about the potential health risks associated with these products. DSHS inspectors tested products at two African specialty stores, one in the Dallas area and one in

Houston. A DSHS statement announcing these findings said that the Nzu products may be covered in a brown or white "dust."

"This report supports the evidence that so-called natural remedies are not always safe or effective," said Gerald G. Briggs, B.Pharm., a clinical professor of pharmacy at the University of California, San Francisco. Instead, he recommends doxylamine and vitamin B₆, which are available over the counter.

A link to the notice is available at www.fda.gov/Safety/MedWatch/SafetyInformation/SafetyAlertsforHumanMedicalProducts/ucm196045.htm.

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