

# Corn, Nuts Deemed OK in Diverticular Disease

BY JOHN R. BELL  
Associate Editor

WASHINGTON — Patients with diverticular disease can most likely eat high-fiber foods like corn, nuts, and popcorn without fear of symptom aggravation, a large prospective study suggests. In fact, some of these foods were associated with a protective effect against such symptoms.

The findings contradict the widely held assumption that foods like these, “being somewhat rougher or less well digested than other foods, would be more likely to traumatize the colon wall,” study investigator Dr. Lisa L. Strate of the division of gastroenterology at the University of Washington, Seattle, said at a press conference at the annual Digestive Disease Week.

Dr. Strate and colleagues reported findings from more than 47,000 male participants in the Health Professionals Follow-



Over 18 years, no association existed between consumption and bleeding.

Up Study, which began in 1986. The men were aged 40-75 at baseline. The investigators analyzed data for participants who had reported newly diagnosed diverticu-

losis or diverticular complications at any of the intervening biennial follow-up points, through 2004.

They also examined data from a diet questionnaire sent to all participants and from a supplemental questionnaire to assess diagnosis and treatment sent to those with diverticular disease.

No multivariate associations existed between consumption of nuts, corn, popcorn, or all three and diverticular bleeding (383 incident cases) and diverticulitis (801 cases) over 18 years of follow-up after the team used a Cox proportional hazards model and controlled for dietary fiber, Dr. Strate reported at the press conference.

In addition, popcorn consumption appeared to confer a protective effect against these conditions. After adjustment for known or potential risk factors for diverticular complications, men with the highest level of popcorn consumption (at least twice a week), compared with men who

ate the least popcorn (less than once per month), had a hazard ratio of 0.72 for diverticulitis, after adjustment for other potential risk factors for diverticular complications.

Similarly, for men who ate nuts at least twice per week, the diverticulitis hazard ratio was 0.8.

Physicians have historically advised patients with diverticular disease to avoid eating foods that often are incompletely digested, Dr. Strate noted at the press conference. “The recommendation stems from a theory that trauma to or obstruction of a single diverticulum results in these complications,” she said. “But, in reality, we don’t understand much about the pathogenesis of these complications. At the same time, nuts and seeds were particularly thought to result in these complications, because [it was thought] they might be more likely to lodge in or to injure the mucosa.” ■

## Postpolypectomy Surveillance Intervals May Be Narrowed

BY DENISE NAPOLI  
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WASHINGTON — Postpolypectomy surveillance should follow surgery far sooner than current guidelines recommend, according to a study presented at the annual Digestive Disease Week.

In a retrospective cohort study, Dr. Madhavi Rudraraju of the University of Oklahoma, Oklahoma City, and her colleagues including Dr. William Tierney found that the recurrence rate for advanced adenomas following polypectomy was 25.8%, and the time to recurrence was 6.4 months—much sooner than the 3-year follow-up surveillance period recommended by current guidelines (*Gastroenterology* 2006;130:1872-85).

The researchers analyzed medical records at the VA Medical Center in Oklahoma City from Jan. 1, 1990, to Dec. 31, 2002. The patients had had at least one surveillance colonoscopy following removal of a polyp with high-grade dysplasia (HGD). Patients under 40 years of age and those with a history of colon cancer were excluded.

There were two control groups: patients with tubular adenomatous polyps, who were matched for polyp size and had at least one surveillance colonoscopy; and those with normal colonoscopy findings who had undergone at least one subsequent colonoscopy. Both groups were also matched for age, gender, race, and year of index colonoscopy.

Polyps with advanced features (adenoma greater than 1 cm; villous histology; HGD; colon cancer) were counted as outcomes of interest. Polyps found in the same region of the colon within 6 months or after documented incomplete polypectomy were counted as residual, rather than incident, lesions, and were excluded.

Most of the patients in all three groups

were male and white, and had a mean age of 66 years. A total of 89 patients met the study criteria for having HGD.

In the HGD group, the mean polyp size was 1 cm, the mean number of polyps was 4.1, all had complete resection, and 73% were sessile. Polyp characteristics for the tubular adenoma group were similar—mean size was also 1 cm, mean number was 4.4, 79.8% were sessile, and, as in the HGD group, 100% were completely resected.

“At the Oklahoma VA Medical Center, surveillance is performed at the least at 3 and 12 months, but most patients had it at 3 months, 6 months, 9 months, and 12 months,” said Dr. Rudraraju. This practice of aggressive surveillance has continued at this facility despite the recent guidelines.

The study found that in the HGD group, 25.8% (23 of 89 patients) went on to develop advanced polyp recurrence, and among those 23 patients, the median time to recurrence was 6.4 months. In contrast, 16.8% (15 of 89) of the tubular adenoma group developed recurring advanced polyps at a median time of 36.6 months after initial polypectomy. In the group with no polyps on initial colonoscopy, 5.6% (5 of 89) developed advanced polyps at a median of 34.8 months later.

The range of advanced polyp development in the HGD group was 2.6-101 months. Overall, 5.6% (5 of 89) developed colon cancer at a median of 6 months after initial polypectomy.

“Until we have further prospective evidence about this group of patients with high-grade dysplasia, it would be very reasonable for [physicians] to consider intense early surveillance, given [that] this represents the largest study to date looking at this particular group of patients,” said Dr. Rudraraju in an interview. ■

## Colonoscopy Complications Rise With Warfarin Use, Comorbidities

BY ALICIA AULT  
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WASHINGTON — Patients who are sicker, who are taking warfarin, and whose polyps are removed by snare with cautery are at higher risk for complications following screening or surveillance colonoscopy, according to an analysis presented at the annual Digestive Disease Week.

Overall, the incidence of serious complications after screening was 2.2 of every 1,000 exams, and it was 1.7/1,000 for potential related events, according to Dr. Cynthia Ko of the University of Washington, Seattle.

Dr. Ko and her colleagues prospectively assessed colonoscopies performed on 18,271 patients aged 40 years and older who were referred for average risk screening, surveillance of prior polyps or cancer, a family history of polyps or cancer, or follow-up after another diagnostic procedure, such as a positive result on a fecal occult blood test.

Patients were excluded if they had a history of recent gastrointestinal bleeding or of inflammatory bowel disease, or had an incomplete colonoscopy because of poor bowel preparation.

The researchers identified the study patients through the Clinical Outcomes Research Initiative, a database maintained by the Oregon Health and Science University, Portland.

Complication rates for surveillance and screening aren’t well defined, Dr. Ko said. In the Washington study, patients were queried at 7 and 30 days after colonoscopy about new symptoms, physician visits, hospitalizations, and unplanned surgeries.

Related events included colon perforation, GI bleeding, diverticulitis, and postpolypectomy syndrome. Potentially related complications included cardiac and neurologic events.

The 18,271 patients came from 19 sites and received colonoscopies from 89 endoscopists. Related complication rates were 1.3/1,000 for GI bleeding requiring hospitalization, 0.8/1,000 for GI bleeding requiring transfusion, 0.9/1,000 for diverticulitis, 0.3/1,000 for diverticulitis requiring hospitalization, 0.1/1,000 for postpolypectomy syndrome, and 0.2/1,000 for perforation.

The authors also calculated an overall complication rate of 2.2/1,000, which included GI bleeding with transfusion, diverticulitis with hospitalization, perforation, or postpolypectomy syndrome. The serious complication rate was 1.4/1,000; serious complications included GI bleeding with hospitalization, diverticulitis with hospitalization, perforation, or postpolypectomy syndrome.

Potentially related events included angina or myocardial infarction (0.6/1,000), stroke or transient ischemic attack (0.4/1,000), and other events, including hospitalization for intravenous catheter site infections, abdominal pain, arrhythmia, gallstones, kidney stones, and drug reactions (0.7/1,000).

Complications were higher for patients undergoing a surveillance or follow-up exam, and for those who were older. There were no complications among the 40- to 49-year-olds, compared with 4.4/1,000 among patients aged 80 and older.

There was a threefold increase in complications in patients who were American Society of Anesthesiologists class III, compared with class I or II patients; a fivefold increase in patients who took warfarin, compared with those who used aspirin or NSAIDs; and a fivefold increase for a polyp removed with cautery. If more than one polyp was removed, there was a 13-fold increase in complications, Dr. Ko said.

The study was supported by the National Institutes of Health and the Centers for Disease Control and Prevention. ■