

## Colonoscopy Without Sedation Deemed Okay

BY ALICIA AULT

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SAN DIEGO — One-third of veterans offered colonoscopy without sedation agreed to the procedure, which was conducted safely and successfully with high levels of patient satisfaction, according to results of a prospective study presented at the annual Digestive Disease Week.

In 2002, the staff at Sepulveda Ambulatory Care Center began offering unsedated colonoscopy because of a nursing shortage in the Los Angeles area, said Dr. Felix Leung, professor of medicine at the University of California, Los Angeles. Sepulveda is part of the VA of Greater Los Angeles health care system.

At Sepulveda, about a third of patients needing colonoscopy have agreed to have it without sedation over the last 5 years, and about a quarter have agreed to this at the VA Palo Alto (Calif.) health care system facility, said Dr. Leung. When a colonoscopy is required, patients are told about the pros and cons, he said. On the plus side, they are told that they can talk during the exam, that they can drive themselves home, and that there is no recovery time. However, they are told “that they would feel every little thing that we do to them, including pain and discomfort.”

Physicians explain that they will do everything possible to minimize the discomfort, but patients are not given any pharmaceutical agents, such as diazepam (Valium), said Dr. Leung in an interview.

Dr. Leung and his colleagues prospectively tracked patients who underwent colonoscopy without sedation during a period of about 2 years and 4 months (July 2005 to June 2006 and July 2006 to November 2007). In 2006, colonoscopies were performed with air insufflation, but in 2007, a new water method was used.

Sixty-two patients were in the air cohort, and 66 were in the water group. Among the 62 in the first group, 54 (87%) had satisfactory bowel prep; 8 (13%) could not complete because of poor bowel prep, and 7 (11%) could not complete because of discomfort. Forty-seven of the 54 who completed (87%), had a successful cecal intubation. Forty-one (76%) said they had a good experience, and 42 (78%) were willing to repeat it without sedation.

Two patients could not complete the study because of discomfort. Sixty-three (97%) had successful cecal intubation. Fifty-five (85%) had a good experience and 60 (92%) said they would repeat the procedure without sedation. Dr. Leung disclosed no conflicts of interest. ■

## Better Resources Needed for Colorectal Polyp Surveillance

SAN DIEGO — Physicians may be conducting surveillance colonoscopy too often on low-risk patients and not enough on high-risk patients, according to results of a substudy of the Polyp Prevention Trial presented at the annual Digestive Disease Week.

Dr. Adeyinka Laiyemo, a cancer prevention fellow at the National Cancer Institute, said that colonoscopy resources need to be managed more effectively, based on the substudy's findings. He presented data on behalf of his colleagues at NCI and the University of Pittsburgh Cancer Institute.

The Polyp Prevention Trial was a 4-year randomized, controlled trial of a low-fat, high-fiber, fruit and vegetable diet on adenoma recurrence. The diet was not found to be effective. However, when that study ended in 2000, 1,297 subjects agreed to be followed.

Patients were followed for a mean of 6.2 years. Of the 1,297 patients, 774 (60%) had a repeat colonoscopy during the follow-up

period. There were 431 patients who were considered low risk because they had one or two nonadvanced adenomas at baseline and no adenoma recurrence at the end of the Polyp Prevention Trial. Thirty percent had a repeat colonoscopy within 4 years, which is sooner than recommended.

There were 55 patients who were considered high risk because they had an advanced adenoma and/or three or more nonadvanced adenomas at baseline and at the end of the original study. Only 41% had a surveillance colonoscopy within the recommended 3 years, and 64% had a repeat exam within 5 years.

After examining the yield of these colonoscopies, the researchers determined that only 4% of the lowest risk group had significant lesions at the 6-year mark, compared to 40% of the highest risk group, said Dr. Laiyemo. “This leads us to realize that we need to improve our use of colonoscopy.”

—Alicia Ault

## CLINICAL GUIDELINES FOR FAMILY PHYSICIANS

### Colorectal Cancer Prevention

BY NEIL S. SKOLNIK, M.D., AND JULIA DIOPOLD, M.D.

The American Cancer Society, the U.S. Multi-Society Task Force on Colorectal Cancer, and the American College of Radiology recently issued joint guidelines on screening and surveillance for the early detection of colorectal cancer and adenomatous polyps in asymptomatic average-risk adults aged older than 50 years (CA Cancer J. Clin. 2008;58:130-60).

Colorectal cancer (CRC) is the third most common cancer diagnosed and the second leading cause of death from cancer in men and women in the United States. Data show that early detection of invasive disease, as well as removal of adenomatous polyps, lowers mortality.

There is a range of screening options, including stool tests, colonoscopy, flexible sigmoidoscopy, and radiologic studies. Each has different considerations—such as efficacy, availability, cost, patient compliance, and risks—that physicians should discuss with patients.

#### Detecting CRC

Blood in the stool is a nonspecific finding, and can be from CRC or polyps larger than 1-2 cm. Stool studies are an acceptable option for CRC screening and are indicated for patients who do not want to have an invasive procedure or bowel preparation. These studies are less likely to prevent cancer, compared with invasive tests, and must be repeated at regular intervals. If the test is abnormal, colonoscopy should be performed.

► **Guaiac-based fecal occult blood testing (gFOBT).** This test must be performed annually with three stool samples. There are false positives and negatives, and vitamin C can interfere with the peroxidase reaction of guaiac cards, yielding false-negative results. An in-office guaiac test on a stool obtained during a rectal exam is not a sufficient screen for CRC.

► **Fecal immunochemical testing (FIT).** This stool-screening option is more specific for human blood and lower GI bleeding than is gFOBT because it tests for human globin and not just heme. It costs more and has greater diagnostic accuracy. It must be performed annually, and two samples are better than one.

► **sDNA.** This is a new method for CRC screening in which DNA alterations produced by carcinomas and adenomas are detected in the stool. It requires a single specimen, although the whole stool needs to be collected, and has better sensitivity for high-grade dysplasia and cancer than does an FOBT, but worse for advanced adenomas. The company that manufactures the test recommends screening at 5-year intervals, but currently there are no data to support any specific interval for testing.

#### Detecting Adenomas and CRC

► **Flexible sigmoidoscopy.** In this endoscopic procedure, the physician examines the lower half of the colon. Its effectiveness depends on the quality of the exam. It does not generally require sedation or full bowel preparation. There is a small risk of perforation, and there may be dis-

comfort during the exam. Adenomas on sigmoidoscopy need colonoscopy. Screening should be performed at 5-year intervals.

► **Colonoscopy.** In this endoscopic procedure, the physician inspects the entire colon and is able to biopsy. A colonoscopy provides definitive treatment through polypectomy in a single session. There is a risk of perforation and a small risk of hemorrhage. Full bowel prep and sedation requires that the patient be accompanied by a chaperone. The interval for colonoscopy is 10 years.

► **Double-contrast barium enema.** In this method, the entire colon is evaluated in a 20- to 40-minute procedure that coats the colonic mucosa with barium and fills the colon

with air through a catheter in the rectum after complete bowel preparation. Risk of perforation is minimal. The procedure detects most cancers and the majority of significant polyps, although there is no opportunity for removal. Abnormal results or polyps larger than 6 mm need colonoscopy. The screening interval is 5 years.

► **CTC or virtual colonoscopy.** In this imaging method, images are acquired via CT, and from these, computer graphics are generated for visualization of 2-D and 3-D views of the entire colon. Full bowel preparation is required. The test takes about 10 minutes and requires no sedation. Diagnostic accuracy appears to be similar to that of colonoscopy, but there is no opportunity for removal of polyps. Patients with one polyp greater than 10 mm or three polyps greater than 6 mm should have a follow-up colonoscopy. The recommended screening interval when no polyps are found is 5 years, although there is no supporting data. Risk of cumulative radiation is not known.

#### The Bottom Line

Because the goal of screening for CRC is to prevent colon cancer, the tests that are the most effective at detecting and removing polyps and early cancers—that is, endoscopic or imaging tests—are the preferred screening methods. Physicians should discuss the benefits and risks of the different methods with patients. If patients prefer not to have an invasive test, a correctly performed annual stool test, followed by colonoscopy for abnormal results, is an acceptable method.



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