

Fecal Occult Blood Testing No Longer Advised

BY ROBERT FINN
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New joint consensus guidelines on screening for colorectal cancer recommend against the use of the most common form of the fecal occult blood test and add stool DNA testing and computed tomographic colonography to a list of the recommended screening options.

The guidelines were a joint project of the American Cancer Society, the U.S. Multi-Society Task Force on Colorectal Cancer, and the American College of Radiology (CA Cancer J. Clin. 2008 March 5 [doi:10.3322/CA.2007.0018]). The Multi-Society Task Force includes representatives from the American College of Gastroenterology, the American Gastroenterological Association, and the American Society for Gastrointestinal Endoscopy.

After reviewing the literature and taking into account expert opinion, the panel concluded that any screening test for colorectal cancer should be able to detect the majority of prevalent or incident cancers at the time of testing. Here the panel chose to make a new distinction between “test sensitivity” and “program sensitivity.”

The most commonly used guaiac-based fecal occult blood tests (gFOBTs), such as Hemoccult II, have relatively low test sensitivity, meaning that a single application of the test has somewhat less than a 50% chance of detecting cancer. Greater sensitivity can be achieved by repeating the test annually, and this is referred to as the program sensitivity.

In view of the fact that patients and physicians do not reliably repeat the test annually, however, the task force recommended that only screening methods with test sensitivities above 50% should be used. The guidelines also state that screening for colorectal cancer with a gFOBT in the office following a digital rectal exam or as part of a pelvic examination “is not recommended and should not be done.”

Screening for colorectal cancer with a gFOBT in the office after a digital rectal exam or as part of a pelvic examination ‘is not recommended.’

The task force did not rule out fecal occult blood tests entirely. A new form of the test, called Hemoccult Sensa, has a sensitivity of 64% for cancer and 41% for advanced adenomas according to one study, so the use of high-sensitivity fecal occult blood tests would be acceptable. The task force also stated that immunochemical-based stool tests and stool DNA tests both have acceptable levels of sensitivity.

High-sensitivity fecal occult blood tests and immunochemical-based stool tests should be repeated annually, but the task

force said that not enough information is available to make a recommendation on the proper interval for stool DNA testing.

In their recommendations on structural screening tests, the task force concluded that colonoscopy, flexible sigmoidoscopy (with insertion to 40 cm or to the splenic flexure), double-contrast barium enema, and computed tomographic colonography (also called virtual colonoscopy) would all be acceptable for individuals at average risk. Beginning at age 50 years, colonoscopy should be repeated every 10 years, and the other structural tests should be repeated every 5 years.

In helping patients decide which structural test to choose, physicians should inform patients about the ben-

efits, limitations, and harms of each test. Some require extensive bowel preparation, and flexible sigmoidoscopy and colonoscopy can result in accidental perforations. Positive findings with flexible sigmoidoscopy, computed tomographic colonography, or double-contrast barium enema will require follow-up colonoscopy.

“It is the strong opinion of this expert panel that colon cancer prevention should be the primary goal of CRC screening,” the guidelines read. “Tests that are designed to detect both early cancer and adenomatous polyps should be encouraged if resources are available and patients are willing to undergo an invasive test.”

The updated guidelines focus on individuals with an average risk of developing colorectal cancer, stating that individuals at increased risk and high risk should continue to follow recommendations previously issued by the American Cancer Society or the U.S. Multi-Society Task Force.

For example, most patients with a history of polyps at prior colonoscopy, those with colorectal cancer, and those with a family history should be screened with colonoscopy. Patients with a genetic diagnosis of familial adenomatous polyposis should be screened annually with flexible sigmoidoscopy beginning at the age of 10-12 years. Those with a genetic or clinical diagnosis of hereditary non-polyposis colon cancer should receive colonoscopy every 1-2 years beginning at age 20-25 years or 10 years before the youngest case in the immediate family.

Patients with inflammatory bowel disease, chronic ulcerative colitis, and Crohn’s colitis should receive colonoscopy with biopsies for dysplasia every 1-2 years beginning about 8 years after the onset of pancolitis or 12-15 years after the onset of left-sided colitis.

The full text of the guidelines is available at <http://caonline.amcancersoc.org/cgi/content/full/CA.2007.0018v1>.

Rectal, Colon Carcinoid Tumor Staging Systems Proposed

BY ROBERT FINN
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HUNTINGTON BEACH, CALIF. — Two proposed staging systems would divide patients who have rectal and colon carcinoid tumors, respectively, into statistically significant prognostic groups based on survival data, Dr. Christine S. Landry reported at the Academic Surgical Congress.

The proposed staging systems show overall survival at 5 years ranging from 100% for stage I rectal carcinoid tumors to 18% for stage IV, and from 96% for stage I colon carcinoid tumors to 20% for stage IV. No system is currently accepted for carcinoid tumors, according to the National Cancer Institute (NCI).

The proposed stages are based on an analysis of the NCI’s Surveillance, Epi-

demology, and End Results (SEER) database for 1977-2004. The SEER database includes 4,701 patients with rectal carcinoid tumors and 2,459 colon carcinoid tumors during that time period, said Dr. Landry of the University of Louisville (Ky.).

“Although rectal carcinoid tumors are often thought of as very slow-growing tumors, they do have significant malignant potential,” Dr. Landry said. “And the purpose of this study was to identify clinical pathological characteristics that predict overall prognosis as well as develop a staging system to help determine overall survival.” Similar considerations were at play in the study of colon carcinoid tumors.

Size of primary tumor, depth of invasion, lymph node metastasis, distant metastasis, and surgical resection were all significantly associated with prognosis for

both rectal and colon carcinoid tumors in univariate analysis. Differences between the two tumors appeared in multivariate analysis.

For patients who have rectal carcinoid tumors, only the size of the primary tumor and the depth of invasion proved statistically significant

prognostic indicators after controlling for the other factors. For patients who have colon carcinoid tumors, on the other hand, lymph node metastasis and distant metastasis were the only statistically significant independent prognostic indicators, she said.

Dr. Landry and her colleagues then looked at different combinations of these indicators to see how best to separate patients into different survival groups. For rectal carcinoid tumors, it proved best to divide patients into T stages based on a tumor size greater than or less than 2 cm and whether the depth of invasion went beyond the muscularis propria.

They proposed that tumors would be designated T1 if they had not grown beyond the muscularis propria and were less than 2 cm in diameter. Tumors would be designated T2 if they were beyond the muscularis propria and less than 2 cm in diameter or not beyond the muscularis propria and 2 cm or more in diameter. And tumors would be designated T3 if they were beyond the muscularis propria and 2 cm or more in diameter.

Colon carcinoid tumors, on the other hand, would be designated T1 if they

were less than 2 cm in diameter, T2 if they were between the 2 cm and 4 cm in diameter, and T3 if they were 4 cm in diameter or more.

Both rectal and colon carcinoid tumors would be designated N0 if there was no nodal metastasis, N1 if there was nodal metastasis, M0 if there was no distant metastasis, and M1 if there was distant metastasis.

The investigators then analyzed different combinations of T, N, and M to determine how they should best be combined into staging systems. (See boxes.)

“Incorporating the staging systems into clinical practice will help us determine the best treatments for rectal [and colon] carcinoid tumors as well as predict overall survival,” Dr. Landry said.

Dr. Landry disclosed that she did not have any relevant financial relationships associated with her presentation.

Proposed Staging for Colon Carcinoid Tumors

Stage	T	N	M	5-Year Survival
Stage I	T1	N0	M0	96%
Stage II	T1	N1	M0	79%
	T2	Any N	M0	
Stage III	T3	Any N	M0	38%
Stage IV	Any T	Any N	M1	20%

Note: Based on analysis of 1977-2004 Surveillance Epidemiology and End Results databases for 2,459 patients with colon carcinoid tumors.

Source: Dr. Landry

Proposed Staging for Rectal Carcinoid Tumors

Stage	T	N	M	5-Year Survival
Stage I	T1	N0	M0	100%
Stage II	T1	N1	M0	77%
	T2	Any N	M0	
	T3	N1	M0	
Stage III	T3	N1	M0	43%
Stage IV	Any T	Any N	M1	18%

Note: Based on analysis of 1977-2004 Surveillance Epidemiology and End Results databases for 4,701 patients with rectal carcinoid tumors.

Source: Dr. Landry