Practice Parameters for Detection of Colorectal Neoplasms

PREPARED BY
THE STANDARDS COMMITTEE
THE AMERICAN SOCIETY OF COLON AND RECTAL SURGEONS

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It should be recognized that these guidelines should not be deemed inclusive of proper methods of care or exclusive of methods of care reasonably directed to obtaining the same results. The ultimate judgment regarding the propriety of any specific procedure must be made by the physician in light of all of the circumstances presented by the individual patient.

Colorectal cancer is the most preventable visceral cancer, and its incidence makes it one of the most important. The lifetime probability of an individual developing colorectal cancer is 5 to 6 percent, translating into an estimated 133,500 new cancers of the colon and rectum diagnosed annually. It is further estimated that 54,900 people will die of their cancer each year. Although the incidence was relatively stable during the last half of the 20th century, there seems to have been a decrease during the past decade. Mortality is also decreasing, which suggests greater awareness of the disease and improved detection. Nevertheless, 65 percent of patients present with advanced disease. It is also reported that when the disease is localized, the five-year survival rate is approximately 90 percent for colon cancer and 80 percent for cancer of the rectum. Most cases are diagnosed after 50 years of age. Although the results of some investigations have not demonstrated a reduction in mortality with screening, these statistics do not reflect the number of patients who are spared from death by early detection and endoscopic removal of polyps, which blunts the adenoma-to-carcinoma sequence.

A consortium of five medical societies (American College of Gastroenterology, American Gastroenterological Association, The American Society of Colon and Rectal Surgeons, American Society for Gastrointestinal Endoscopy, and Society of American Gastrointestinal Endoscopic Surgeons) responded to a request for a proposal from the Agency for Health Care Policy and Research to develop national guidelines for colorectal cancer screening. An interdisciplinary panel of 16 health care professionals from the fields of medicine, nursing, consumer advocacy, health care economics, behavioral sciences, and radiology evaluated the currently available evidence for colorectal cancer screening and made recommendations for physicians and the public. The panel studied 3,500 peer-reviewed published articles and analyzed
350 articles in detail specifically assessing the following: 1) performance of screening tests; 2) effectiveness of screening tests; 3) acceptability to patients; 4) cost-effectiveness; and 5) outcome. A computer simulation of the consequences of conducting the various screening strategies in the population was done to determine the risks and benefits of each test. The guidelines made recommendations for people in two groups: average individuals and individuals at increased risk for developing colorectal cancer. All screening strategies, including annual fecal occult blood testing, 7 screening sigmoidoscopy every five years, 8 screening by both annual fecal occult blood testing and flexible sigmoidoscopy (every 5 years), 9 double contrast barium enema every five to ten years, 10 and colonoscopy every ten years, 11 were found to have a net benefit. The panel analyzed an Office of Technology Assessment study for screening average-risk individuals, which demonstrated that costs associated with colorectal cancer screening are within the range of cost-effectiveness commonly accepted for other tests, such as mammography.

Recently revised colorectal cancer screening guidelines from the American Cancer Society have been announced. 12 The new guidelines divide the population into three categories—average, moderate, and high risk—with specific recommendations for each. The

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<th>Risk</th>
<th>Procedure</th>
<th>Onset (Age, yr)</th>
<th>Frequency</th>
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| I. Low or Average—65 to 75 percent | Digital Rectal exam and one of the following:  
A. Asymptomatic—no risk factors Fecal occult blood testing and flexible sigmoidoscopy  
B. Colorectal cancer in none first degree relatives Total colon exam (colonoscopy or double contrast barium enema and proctosigmoidoscopy) | 50              | Yearly                     |
| II. Moderate Risk—(20 to 30 percent of people) | Colonoscopy  
A. Colorectal cancer in first-degree relative, age 55 or younger, or two or more first degree relatives of any ages  
B. Colorectal cancer in a first-degree relative over the age of 55  
C. Personal history of large (≥1 cm) or multiple colorectal polyps of any size  
D. Personal history of colorectal malignancy—surveillance after resection for curative intent | 40 or 10 yrs. before the youngest case in the family, whichever is earlier  
50, or 10 yrs. before the age of the case, whichever is earlier  
One year after polypectomy  
1 year after resection | Every 5 years |
| III. High Risk (6 to 8 percent of people) | Flexible Sigmoidoscopy; consider genetic counseling; consider genetic testing  
Colonoscopy; consider genetic counseling; consider genetic testing  
Colonoscopy  
Colonoscopy  
Colonoscopy  
Colonoscopy | 12 to 14 (Puberty)  
21 to 40  
15th  
15th | Every 1 to 2 years  
Every 2 years  
Every 1 to 2 years  
Every 1 to 2 years |

FOBT = fecal occult blood testing; Flex-sig = flexible sigmoidoscopy.