Revision in American Cancer Society Recommendations for the Early Detection Of Colorectal Cancer

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The National Board of Directors of the American Cancer Society, at its June 1992 meeting, approved the following revisions in the Society's guidelines for the early detection of colorectal cancer in asymptomatic individuals, as recommended by the Colorectal Cancer Task Force:

1. That the American Cancer Society Guidelines for the early detection of cancer in asymptomatic people be revised to recommend sigmoidoscopy, preferably flexible, for males and females, age 50 and over, every three to five years, based on advice of physician.

The American Cancer Society encourages the wide-scale availability of flexible sigmoidoscopy performed by primary care physicians and/or highly trained paramedical personnel at affordable costs. Recent data suggest that it may be possible to increase the recommended interval between flexible sigmoidoscopic examinations to every five years or longer. However, before making a change in its current recommendations, the American Cancer Society requires additional evidence.

The feasibility of screening double-contrast barium enema or colonoscopic examinations at five- or 10-year intervals so as to visualize the entire colon of average-risk persons over age 50 years warrants careful study as to efficacy, availability, patient acceptance, safety, and cost. These examinations are not currently recommended for screening purposes.

2. That the term "fecal occult blood test" be substituted for the term "stool guaiac slide test," so that the American Cancer Society recommends a fecal occult blood test for males and females age 50 and over every year.

The addition of the words "preferably flexible" to the recommendation for sigmoidoscopy places emphasis on the greater comfort with the flexible scope compared with the rigid scope and the likelihood of greater patient compliance with the recommended guidelines. While the guaiac-based stool blood test is currently under evaluation in large-scale screening programs and is widely used in clinical practice, newer tests such as the immunochemical method are also under study for possible use. In the future, molecular ge-

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netic technology, which provides the ability to detect aberrant genes in the stool or blood, will require prospective clinical validation.

During this period of evolving modalities, the Board of Directors agreed that a broader recommendation for fecal occult blood tests provided greater flexibility compared with limiting the recommendation specifically to the guaiac-based stool blood test.

Certain asymptomatic persons have higher risks for developing colorectal cancer. These include those with a family history of colorectal cancer (defined as colorectal cancer in one or more first-degree relatives); those with chronic inflammatory bowel disease (ulcerative colitis or Crohn's disease); those with familial polyposis syndromes; those with a history of prior colorectal, breast, endometrial, or ovarian cancers; and those with a history of adenomas of the large bowel. Surveillance of such persons should be determined on an individual basis after discussions between the patient and physician. Surveillance may be required at an earlier age than for average-risk persons, and additional examinations may be required.

The American Cancer Society places great emphasis on the importance of the family history in assessing risk if the age of onset of colorectal cancer in the affected relative is 55 years or below. First-degree relatives include blood-related parents, siblings, and children.

An examination of the entire colon and rectum is advised; colonoscopy or double-contrast barium enema should be performed every five years in men and women, beginning at age 35 to 40 years for those with one or more first-degree relatives with colorectal cancer with an age of onset of 55 years or younger. The finding of a radiologic abnormality on barium enema will usually necessitate colonoscopy.

Members of families with a history of familial adenomatous polyposis require earlier screening utilizing flexible sigmoidoscopy. Members of families with a history of hereditary nonpolyposis colorectal cancer require earlier and more intense surveillance utilizing colonoscopy.

Persons with inflammatory bowel disease syndromes are at exceptionally high risk for colorectal cancer and require individualized management.

Persons with a history of colorectal adenomas may be at higher risk for cancer of the colon and rectum. Interim recommendations for postpolypectomy surveillance include the following:

1. When a polyp has been identified in the colon and rectum, it should be removed for histological examination.

2. Individuals with an adenomatous polyp detected by sigmoidoscopy, colonoscopy, or barium enema need to have the *entire* colon cleared of all polyps considering the high rate of additional (synchronous) adenomas. Individuals found to have only a single or several small tubular adenomas (<1 cm) at the initial flexible sigmoidoscopic examination may not need to have the entire colon examined. More confirmatory evidence on this point is being sought by the Colorectal Cancer Task Force.

3. Individuals need a follow-up program of surveillance to identify subsequent (metachronous) adenomatous polyps if the initial endoscopic findings included a single or several adenoma(s) over 1 cm and/or adenoma(s) with villous changes. Most patients can have subsequent follow-up by colonoscopy at intervals of every three to five years, provided the entire colon has been satisfactorily examined and cleared. Individuals who have had a single or several small tubular ademona(s) (<1 cm) removed by colonoscopic polypectomy may not require repeated follow-up surveillance examinations. More confirmatory evidence on this point is being sought by the Colorectal Task Force.

4. Surveillance needs to be individualized for those with a malignant adenoma, numerous adenomas, or large sessile adenomas.

5. In the aged, individual considerations such as general health and comorbid conditions will help to determine when follow-up surveillance should be discontinued.

Persons with a personal history of colorectal cancer are at high risk for developing

SUMMARY OF AMERICAN CANCER SOCIETY RECOMMENDATIONS FOR THE EARLY DETECTION OF CANCER IN ASYMPTOMATIC PEOPLE

Test or Procedure	Population		
	Sex	Age	Frequency
Sigmoidoscopy, Preferably Flexible	M & F	50 and over	Every 3 to 5 years
Fecal Occult Blood Test	M & F	50 and over	Every year
Digital Rectal Examination	M & F	40 and over	Every year
Pap Test	F	All women who are or who have been sexually active, or have reached age 18, should have an annual Pap test and pelvic examination. After a woman has had three or more consecutive satisfactory normal annual examinations, the Pap test may be performed less frequently at the discretion of her physician.	
Pelvic Examination	F	18 – 40 Over 40	Every 1 – 3 years with Pap test Every year
Endometrial Tissue Sample	F	At menopause, women at high risk*	At menopause
Breast Self-examination	F	20 and over	Every month
Clinical Breast Examination	F	20 – 40 Over 40	Every 3 years Every year
Mammography**	F	40 – 49 50 and over	Every 1 – 2 years Every year
Health Counseling and Cancer Checkup***	M & F M & F	Over 20 Over 40	Every 3 years Every year

*History of infertility, obesity, failure to ovulate, abnormal uterine bleeding, or estrogen therapy.
**Screening mammography should begin by age 40.
***To include examination for cancers of the thyroid, testicles, prostate, ovaries, lymph nodes, oral region, and skin.

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another colorectal cancer and require periodic evaluation of the large bowel as well as examination for evidence of metastases.

Persons with a history of breast, ovarian, or endometrial cancers are at some increased risk, but their risk is probably lower than that of the high-risk groups mentioned above. These people should follow the standard American Cancer Society recommendations for the detection of colorectal cancer in average-risk asymptomatic persons.

Bibliography

1. Atkins WS, Morson BC, Cuzick J: Long-term risk of colorectal cancer after excision of rectosigmoid adenomas. N Engl J Med 326:658–662,1992.
2. Bishop DT, St. John DJB et al: Genetic susceptibility to common colorectal cancer: How common is it? Gastroenterology 102(4) Part 2:A346,1992.
3. Cannon-Albright LA, Skolnick MH et al: Common inheritance of susceptibility to colonic adenomatous polyps and colorectal cancers. N Engl J Med 319:533–537,1988.
4. Eddy D: Screening for colorectal cancer. Ann Intern Med 113:373–384,1990.
5. Ransohoff DF, Lang CA, Kuo HS: Colonoscopic surveillance after polypectomy: Considerations of cost effectiveness. Ann Intern Med 114:177–182,1991.
6. Winawer SJ, O'Brien MJ, Waye JD et al: Risk and surveillance of individuals with colorectal polyps. Bull World Health Organ 68:789–795,1990.
7. Winawer SJ, St. John J, Bond J, et al: Screening of average-risk individuals for colorectal cancer. Bull World Health Organ 68:505–513,1990.