Colorectal Cancer Screening: Why Aren't We Doing Better?

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March 2004 has again been designated as National Colorectal Cancer Awareness month. This is the fifth year that March has received this designation and despite the efforts of multiple organizations, our progress in eliminating or significantly reducing colorectal cancer has been slow. As specialists in the field, we know that colorectal cancer is common and can be prevented, and that survival is related to tumor stage at diagnosis. As such, colorectal cancer fulfills the criteria for a disease in which screening is appropriate.¹ Unfortunately, screening is not universally performed. Several factors continue to limit our efforts. The more important ones are knowledge, compliance, availability, and economics.

From the standpoint of knowledge, we must continue to educate our patients and colleagues on colorectal cancer. Colorectal cancer is the second most common cause of cancer related deaths and one of the few truly preventable cancers. The American Cancer Society estimates we will diagnose 135,400 new cases of colorectal cancer in 2004 and over 57,000 of our patients will die from this disease.² Prognosis is related to disease stage and screening identifies precursors of cancer (e.g., polyps) as well as cancer in its early stages.³⁻⁵ A reduced mortality results from removing adenomatous polyps and screening is cost-effective.⁶⁻⁸

Screening has been shown to be less expensive than treating colorectal cancer if compliance rates are high and the cost of screening tests is reasonable.⁶ Colonoscopy is the preferred screening method and Medicare has reimbursed screening colonoscopy since July 1, 2001. Despite these facts, compliance with colorectal screening remains low for patients and providers.⁶⁻⁸ Screening recommendations are not always provided to patients and too many physicians and their families have not been screened.

Even if all patients at risk were compliant, availability of colonoscopy remains a concern. It is estimated that there are over 50 million US patients at risk for

colorectal cancer. Currently, there are ~12,000 gastroenterologists, 1,200 colorectal surgeons, and 20,000 general surgeons practicing in the United States. If all these physicians spent 50% of their time doing colonoscopy (150 days a year) and completed 15 colonoscopies a day, they would perform fewer than 5 million colonoscopies a year. Unfortunately, not all of these physicians perform colonoscopy (especially the general surgeons), many don't spend such a high percentage of their time doing colonoscopy, and often they don't do as many procedures per day. These limitations have led to waiting times of several months for screening colonoscopy in many locations. Possible solutions are to train more endoscopists (especially our general surgery residents) and to build enough endoscopy space.

Scheduling also plays a role in efficiency. The most efficient use of physician time is to allow endoscopists to have two rooms available when they scope. Maximum unit efficiency is obtained if the procedure time can be kept to less than half the room turnaround time. CT or MRI colonography is under development, but currently requires more physician time to interrupt the study than most colonoscopists require to perform an exam. Patients still require a bowel preparation, the accuracy is limited, and there is no therapeutic potential. Until radiologists' time and equipment can be economically competitive and other limitations can be resolved, colonography will have a role, but not a major one.⁹

Multiple efforts continue to push for expanded colorectal screening. Dr. Ernestine Hambrick is a leading advocate with the Stop Colon/Rectal Cancer Foundation (<http://www.coloncancerprevention.org/>). The American Society of Colon and Rectal Surgeons has organized educational seminars for patients and the news media at our national meetings and supports public relations activities promoting colorectal cancer screening. In addition to supporting such organizations, we must make screening a daily component of our patient care

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and train an adequate number of endoscopists. We are making progress, but each of us must increase our efforts to expand screening until it becomes universal. This remains our best chance to eliminate this major health concern.

REFERENCES

1. Beck DE. Colorectal cancer screening. *Clin Colon Rectal Surg* 2000;14:115
2. Greenlee RT, Hill-Harmon MB, Murray T, Thun M. Cancer statistics, 2001. *CA Cancer J Clin* 2001;51:15–36
3. Mandel JS, Bond JH, Church TR, et al. Reducing mortality from colorectal cancer by screening for fecal occult blood. *N Engl J Med* 1993;328:1365–1371
4. Selby JV, Friedeman GD, Quesenberry CP, et al. A case-controlled study of screening sigmoidoscopy and mortality from colorectal cancer. *N Engl J Med* 1992;326:653–657
5. Newcomb PA, Norfleet RG, Storer BE, Surawicz TS, Marcus PM. Screening sigmoidoscopy and colorectal cancer mortality. *J Natl Cancer Inst* 1992;84:1572–1575
6. Winawer SJ, Zauber AAG, Ho MN, et al. Prevention of colorectal cancer by colonoscopic polypectomy. *N Engl J Med* 1993;329:1977–1981
7. Lieberman DA. Cost-effectiveness of colon cancer screening. *Am J Gastroenterol* 1991;86:1789–1794
8. Jaffe PE. Colorectal cancer screening and surveillance. *Clin Colon Rectal Surg* 2001;14:359–367
9. Weinstein LS, Timmcke AE. Future technology: colography and wireless capsule. *Clin Colon Rectal Surg* 2001;14:393–399