

Contemporary Medicine

COLORECTAL CANCER

Better Detection, Increased Awareness Highlight Progress Against Colorectal Cancer, Jefferson Experts Say

Improved screening techniques and heightened awareness mean that both physicians and patients can do more than ever before against colorectal cancer.

Colorectal cancer – the third most common cancer in the United States and the second leading cause of cancer death – takes the life of some 56,000 Americans each year.

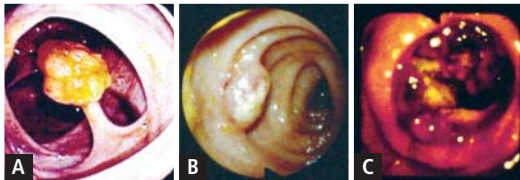
Yet, colorectal cancer stands apart from other major cancers.

“Colon cancer is different than the other cancers because we are mainly screening for precancerous growths as opposed to early cancers,” says Richard Wender, MD, Professor and Chair of Family Medicine at Thomas Jefferson University Hospital and Jefferson Medical College of Thomas Jefferson University.

Since 90 to 95 percent of all colon cancers stem from polyps, small abnormal growths in the colon, finding and removing polyps can prevent cancer from developing.

“That’s why there is such an opportunity here,” says Dr. Wender. “Theoretically, we could prevent 90 percent of the deaths, but current screening rates allow us to save only one third that amount.

“The real challenge is to make sure that both physicians and their patients get the appropriate information so that lives can be saved,” he says.



A,B: Colon polyps, C: Colon cancer

Screening choices

A host of screening tests exist. For those over the age of 50, most current guidelines from nationally recognized organizations recommend any of several tests, including a fecal occult blood test (FOBT) annually, a flexible sigmoidoscopy either in conjunction with the FOBT or by itself at least every five years, or a double contrast barium enema every five years, or a colonoscopy, considered the gold standard of screening, every 10 years.

According to Dr. Wender, patients are increasingly mixing screening tests. While most current guidelines recommend a colonoscopy by age 50, he says, many individuals say they are not ready for a colonoscopy and decide on an FOBT, a simple, do-it-yourself test to detect blood in the stool. “It’s conceivable that you’ll see official guidelines stating that, for example, flexible sigmoidoscopy and FOBT in combination are a good initial test along with a one-time colonoscopy at age 60. If no polyps are seen, then perhaps an annual stool test 10 years later. Guidelines are a rapidly changing area,” he says.

Still, all roads lead to colonoscopy to achieve a nearly complete view of the colon.

The incidence of colon cancer has leveled out, Dr. Wender says this is not surprising given improved awareness and screening methods. The real impact has come in the death rate from the disease, which has been declining in women since the 1950s, and in men since the 1980s.

“We are making progress against colon cancer and cancer in general, but we could do so much more,” Dr. Wender says. “We know as of the year 2000, that cancer screening saves lives.”

Awareness and education

Anthony Infantolino, MD, Clinical Director of Endoscopic Ultrasound and Photodynamic Therapy and Clinical Professor of Medicine at Jefferson, still sees a problem in awareness. Doctors need to stress the benefits of screening because many people don’t realize they are at risk for colorectal cancer.

At the same time, some patients don’t want to go through the preparation for tests such as the colonoscopy, which includes an uncomfortable process to clean the bowels. In addition, many women have the misconception that colon cancer is mainly a male problem, though women are just as likely to develop the disease.

Ronald Myers, PhD, sees another problem: poor follow-up. About half of those individuals with abnormal colorectal cancer screening results fail to have the necessary follow-up examination, says Dr. Myers, who is Professor of Medicine at Jefferson Medical College. He suggests that primary care physicians pay particular attention to screening follow-up issues, and even provide “targeted education” to encourage these high-risk individuals to take appropriate steps in their care.

Technology advancements

Improved screening technology has been a key to improving the fight against colorectal cancer, says Jefferson Hospital radiologist Anna Lev-Toaff, MD, Professor of Radiology at Jefferson Medical College. As the use of colonoscopy becomes increasingly widespread, a newer technique called virtual colonoscopy is gaining popularity. A new test under study, virtual colonoscopy entails using X-rays delivered through a CT scanner to take cross-sectional views through the abdomen, then reconstructing those views with special software. The resulting images provide the same view of the colon, more or less, as does an optical colonoscopy. Virtual colonoscopy is less invasive and relatively quick.

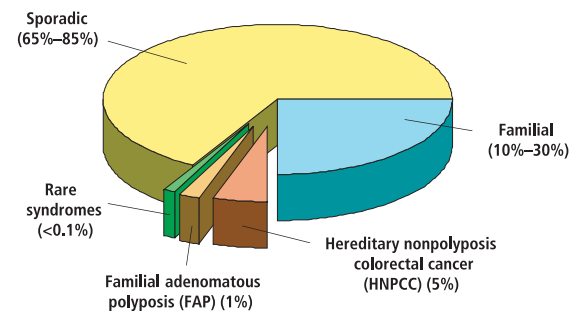
Colonoscopy, she notes, isn’t perfect. It may be incomplete in some patients because the intestines can be convoluted, with crevices, twists and turns, making it difficult to see the entire colon. While virtual colonoscopy does not have that problem, says Dr. Lev-Toaff, studies comparing the two techniques have given mixed results.

Virtual colonoscopy will eventually develop more of a role in screening, notes Anthony J. DiMarino Jr., MD, William Rorer Professor of Medicine and Director of the Division of Gastroenterology and Hepatology at Jefferson. But for now, “It is a technique in evolution.”

Treatment options

If found early, colorectal cancer is 90 percent curable, says Scott Goldstein, MD, Director of the Division of Colorectal Surgery at Jefferson. Dr. Goldstein explains that it’s crucial to detect the cancer when it remains inside the intestine because it is there that surgeons can remove the disease. The odds worsen when the cancer spreads to other areas of the body, such as the lymph nodes and the liver. Depending on where the disease has spread, oncologists often treat the patient with chemotherapy.

As with most cancers, doctors worry about the disease returning. Dr. Goldstein notes that patients are seen every three months after colorectal cancer surgery for the first two years. Of those colorectal cancers that return, approximately 80 to 85 percent return in the first two years.



Adapted from ASCO, 1999

Colorectal cancer has many causes

The genetic factor

About 65 to 70 percent of colorectal cancers are sporadic with no family history involved. Roughly 10 to 15 percent occur where a family member has the cancer. A much smaller percentage includes those with hereditary cancer, the most common of which are FAP and HNPCC.

According to Bruce Boman, MD, PhD, Director of the Division of Genetic and Preventive Medicine at Jefferson Medical College and Thomas Jefferson University Hospital, 1 in approximately every 400 people has a genetic mutation that predisposes him or her to develop colorectal cancer. The key is to identify these individuals before they develop cancer.

“It often begins with a patient who is diagnosed with colorectal cancer,” says Dr. Boman. “If the patient has one of two factors – a family history of colorectal cancer or is younger than age 60 when diagnosed with colorectal cancer – it is recommended that the patient go for genetic counseling. Once we identify someone with a genetic mutation for colorectal cancer risk, we can then screen the rest of their family to see if they carry the mutation.

“Once we confirm the mutation, we can institute measures such as aggressive screening with colonoscopy to remove pre-malignant polyps before they develop into cancer – an approach that will save many lives,” says Dr. Boman.

Please join us on Wednesday, June 9, at 4:30 p.m., for a live internet broadcast featuring an open, candid discussion with experts on colorectal cancer prevention, diagnosis and treatment. You’ll have an opportunity to view panel experts in genetics, radiology, gastroenterology and surgery mentioned in this article, hear procedure explanations and view in-depth patient interviews. The 60-to-90 minute broadcast (Replay version available June 10.) and Jefferson’s complete library of webcasts are available at www.JeffersonHospital.org/webcast. CME credits are available to physicians who sign up to view the webcast.

To refer a patient, or to reach any of the physicians mentioned, please call 215-955-0215. To schedule an appointment, call 1-800-JEFF-NOW.