

IMAGINE THAT IMAGE



A PATIENT-CENTERED RADIOLOGY NEWSLETTER

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COLON CANCER: A COMMON KILLER

Chances are you know someone who has been affected by colon or rectal cancer.

Colorectal cancer affects more than 142,000 patients in the United States yearly and is the second most common cancer killer in both men and women.

Major risk factors, such as a strong family history, personal history of cancer, inflammatory bowel disease, and some genetic syndromes, may increase your chances of developing colorectal cancer. Additional risk factors include lack of regular physical activity, poor intake of fruits and vegetables (low-fiber, high-fat diet), obesity, alcohol consumption, and tobacco use.

Symptoms may include bloody stool, persistent stomach pain or cramps, and unexpected weight loss. Talk with your doctor if you have any of these symptoms.

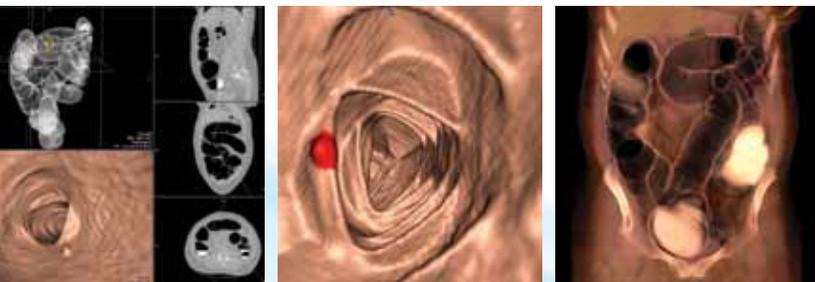
For more information, visit www.cdc.gov/cancer/colorectal.



▶ THE FACTS: COLORECTAL CANCER

- Colorectal cancer is the second-leading cause of cancer-related death in the United States for both men and women.
- Direct medical costs of colorectal cancer in 2010 were \$14 billion.
- In 2008, only 63 percent of adults aged 50–75 years were screened as recommended.
- 22 million people are not up to date with their colorectal cancer screening.

CT COLONOGRAPHY: The Cutting Edge of Colon Cancer Screening



Computed tomographic colonography (CTC), also known as virtual CT colonoscopy (VCT), is a relatively new, minimally invasive colon cancer screening technique that is safe and fast and requires no sedation. The American Cancer Society, American College of Radiology, and U.S. Multisociety Task Force on Colorectal Cancer have all endorsed CTC as an effective screening technique.

With innovative computer image processing, radiologists may study the colon using both two-dimensional and three-dimensional techniques, allowing for a virtual fly-through of the bowel. Radiologists also may simultaneously evaluate abnormalities

outside the colon; conventional colonoscopy allows a physician to inspect only the inner lining of the colon.

Several surveys have shown that patient satisfaction is high, with more than 90 percent of patients rating their CTC experience as good or excellent in one study. A majority of patients who have undergone both CTC and conventional colonoscopy prefer CTC, with many citing less pain and discomfort.

In many cases, CTC is offered when traditional colonoscopy fails to see the entire colon or when patients are at higher risk of complication during conventional testing. Check with your doctor and insurance provider for specific coverage details.

“I think CTC is particularly valuable as it gives patients at risk for developing colorectal cancer the choice of an additional, highly effective screening test. This will hopefully promote greater participation in colorectal cancer screening and thus save lives.”

- H. SCOTT BEASLEY, MD

Chief of Radiology, UPMC Shadyside and Hillman Cancer Center
(See reverse for Faculty Spotlight on H. Scott Beasley)



COLON CANCER SCREENING SAVES LIVES

Colon cancer typically develops from a precancerous growth in the colon or rectum called a polyp. If found early, these polyps may be removed before cancer develops or spreads. Several screening tests are available, and each has its own benefits and drawbacks.

- **Fecal occult blood test (FOBT)** checks a stool sample for blood. Though simple and inexpensive, it is insensitive for most polyps. Also, there are many reasons to have bloody stool that may not be related to cancer.
- **Flexible sigmoidoscopy** is a fairly quick though invasive procedure in which a physician uses a flexible tube with a light and camera at one end to look into the colon. Though there is minimal discomfort, only one-third of the colon is inspected.
- **Optical colonoscopy** is similar to sigmoidoscopy; however, a longer tube is used to inspect the entire colon. Small polyps may be removed and biopsies of suspicious lesions may be performed at the time of the exam. However, the procedure may be time consuming, usually requires sedation, and is fairly expensive. There also is a risk of infection and damage to the bowel wall.
- **CT (virtual) colonography (CTC)** is a newer option that is being offered in many centers and through many insurance plans as a fast, safe, and less-expensive alternative to a traditional optical colonoscopy.

CT COLONOGRAPHY FAQ

IS PREPARATION REQUIRED?

A bowel-cleansing preparation is still required; however, research techniques that virtually remove fluid and fecal material are being tested.

WHAT IS THE EXAM LIKE?

During the exam, a small tube is placed into the rectum in order to fill the colon with gas. CT images are taken, the tube is removed, and the test is complete. No sedation is required, and patients may return to their normal activities immediately following the exam.

HOW LONG DOES IT TAKE?

A typical CTC takes approximately 10–15 minutes. Multiple images are taken, and the radiologist virtually inspects your colon using multiple computer imaging techniques.

IS IT SAFE?

CTC complication rates are exceedingly low—less than the complication rate for conventional colonoscopy in most studies.

The radiation exposure is typically less than half the dose you may receive from a routine CT scan of the abdomen and pelvis and is even less than a double-contrast barium enema, another screening exam used for the colon.

HOW EFFECTIVE IS CTC?

CTC is faster and less expensive than optical colonoscopy. Recent studies show that the sensitivity for detecting cancer and clinically relevant polyps are as good as in conventional optical colonoscopy.

However, if a suspicious lesion such as a polyp is detected, conventional colonoscopy is then required to remove or biopsy the abnormality.

► THE GUIDELINES: CANCER SCREENING

- Screening is recommended for both men and women starting at age 50.
- Depending on the screening test used, routine screening at regular intervals is necessary, typically every five to 10 years.
- Patients with a strong family history or other risk factors should talk to their doctor about potential changes to their screening routine.



FACULTY SPOTLIGHT

H. SCOTT BEASLEY, MD

Chief of Radiology,
UPMC Shadyside and
Hillman Cancer Center

Scott Beasley is a well-known board-certified radiologist who is specialized in abdominal imaging and intervention and currently practices at UPMC Shadyside and Hillman Cancer Center. Not only is he involved in the clinical practice of radiology, he also participates in the daily education of diagnostic radiology residents and abdominal imaging fellows.

Beasley has a particular interest in CT colonography. He attended the First International Symposium on Virtual Colonoscopy in Boston, Mass., in 1998; started the first CT colonography program at UPMC; and has been involved with CTC practice for approximately 15 years.

At UPMC, he is YOUR radiologist.

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