



## Colorectal Cancer: Life-Saving Options for Early Detection

**C**olorectal cancer is easy to prevent or treat when growths are detected early with screening tests. For that reason, doctors recommend that most people start regular screening for colorectal cancer at age 50.

The standard screening test for colorectal cancer is colonoscopy, which allows the physician to see cancerous and precancerous growths in the colon and rectum. However, other options may be available to you. To decide which option is best, talk to your physician.

### Understanding the options

During **conventional colonoscopy**, the doctor examines the rectum and colon using a lighted, flexible tube called a colonoscope, which is inserted through the anus. When a precancerous growth (or polyp) is detected, it can be snipped away during the colonoscopy, preventing a cancer from ever developing. When a cancerous growth is found early, it can usually be treated successfully.

A less invasive technique called **virtual colonoscopy** offers another option for detection of polyps and colorectal cancer. The main difference between conventional and virtual colonoscopy is how the doctor sees inside the patient. In virtual colonoscopy, computed tomography (CT) is used to scan the colon from outside the body. A computer then assembles the CT images into three-dimensional images that can show polyps and other abnormalities.

Both types of colonoscopy require the patient to prepare for the exam by cleansing the colon. Usually, this is accomplished by taking laxatives 24 hours before the test and not eating or drinking anything after midnight the night before the colonoscopy. Some physicians also require that the patient consume nothing but clear liquids for a day or two before the procedure.

Conventional colonoscopy is the

more widely used of the two tests. Patients are usually sedated during the test, which eliminates discomfort but requires someone else to drive them home afterward. If any polyps are discovered during the procedure, they are immediately removed. Removing polyps—which can become cancerous—is considered one of the most effective ways to prevent colorectal cancer.

Virtual colonoscopy does not require sedation, which makes the procedure more convenient. Although preparation requires the same bowel cleansing as for standard colonoscopy, the procedure itself is shorter. Instead of inserting a colonoscope through the entire length of the colon, the physician inserts only a thin tube into the rectum to expand the colon with room air or carbon dioxide. Then, the CT scans are performed.

While virtual colonoscopy can detect polyps, the physician has no way to remove them during the procedure. Instead, polyps have to be removed later that same day or at another time during a follow-up conventional colonoscopy. However, less than 10% of the patients screened have a significant polyp. Research has shown that virtual colonoscopy can be as effective as conventional colonoscopy in finding polyps 5 mm and larger, but virtual colonoscopy is less reliable than the conventional exam for detecting smaller polyps.

The need to have a conventional colonoscopy to remove any polyps is often cited as a disadvantage of virtual colonoscopy. However, David Vining, M.D., a professor in M. D. Anderson's Department of Diagnostic Radiology and the inventor of virtual colonoscopy, said virtual colonoscopy allows the majority of patients to avoid unnecessary invasive procedures. "About 90% of patients who undergo virtual colonoscopy do not have a significant polyp that requires removal, and thus they don't need a follow-up colonoscopy," he said.

One advantage of virtual colonoscopy is that it doesn't have the risks associated with sedation. The risk of instrument-related complications, such as bleeding

or tearing of the colon, also is lower than for the conventional procedure.

Other screening tests for colorectal cancer include the **fecal occult blood test** and **fecal immunohistochemical test**, which check for blood in the stool; **sigmoidoscopy**, which is similar to colonoscopy but is limited to the rectum and lower colon; and **double contrast barium enema**, during which x-rays are used to check for cancer after the patient receives a barium enema and has air pumped into the colon.

### Importance of screening

No matter which test is chosen, it is important for people over age 50 to get some type of regular colorectal screening. "For patients diagnosed with early-stage colon cancer, 90% are still alive after 5 years. But for patients diagnosed with later stages, after the cancer has spread to distant organs, only 10% are still alive after 5 years," Dr. Vining said. "Getting screened for colorectal cancer means that you're improving your odds of finding the cancer early, when it's easiest to treat and you have the best chance of long-term survival. Better yet, you can prevent the disease altogether by detecting and removing precancerous polyps."

Regular screening for colorectal polyps and cancers is recommended for everyone age 50 years or older, or earlier for people with a family history of colorectal cancer or a personal history of inflammatory bowel disease. A standard colonoscopy is recommended every 10 years, or more often if a polyp is found. A virtual colonoscopy is suggested every 5 years. ●

*For more information, talk to your physician, or:*

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