

About Cancer Screening

The Importance of Screening for Early Detection of Colorectal Cancer

The good news about colorectal cancer is that it is up to 90% curable when caught early enough. Screening is important for this reason. Colorectal cancer arises from benign growths in the colon known as polyps.. The goal of screening is to detect and remove polyps before they have the opportunity to become cancerous. According to The Cancer Research Foundation of America as many as 30 to 40 percent of the population over 50 has pre-cancerous adenomatous polyps. Nearly all colorectal cancer develops from these growths in the colon and rectum. Even if a cancer is detected during screening, it is often small and early in stage making curable surgery and treatment more likely.

Common Symptoms

Common symptoms and warning signs of colorectal cancer include:

- Blood in the stool
- A change in bowel habits
- Diarrhea, constipation or feeling that the bowel does not empty completely
- Stools narrower than usual
- General abdominal discomfort (frequent gas pains, bloating, fullness, and/or cramps)
- Weight loss with no known reason
- Constant tiredness

If any of these symptoms persist, or you have a family history of colorectal cancer you should talk to your health care provider or a gastroenterologist.

Screening for Blood in Stool

Frequently, but not always, polyps become irritated and bleed. Commonly this bleeding is in such small amounts that it is not perceptible to the human eye. An 18-year study released in 1999 by the Centers for Disease Control and Prevention confirms that regular screening with a Fecal Occult Blood Test to detect occult (hidden) blood in stool can prevent 33 percent of colorectal cancer. Recent clinical findings by The University of Minnesota and clinical trials in Denmark and England also definitively confirm that screening for colorectal cancer can save lives. Detected at its earliest stages, colorectal cancer is up to 90 percent curable. Yet only 37 percent of colorectal cancer is detected at this stage. Oddly enough, although physicians now routinely recommend screening for breast, cervical and prostate cancer screening for colorectal cancer is vastly underutilized. According to the University of Minnesota study, only four in 10 Americans who should be screened for colorectal cancer get the proper tests. This may be due to the uneasiness patients or physicians feel in discussing this subject. However, as Dr. Bernard Levin, Chair of the National Colorectal Cancer Roundtable, has noted, patients are at risk of literally dying of embarrassment. Regular screening for colorectal cancer allows disease detection of early stage cancers which are up to 95 percent curable.

Major Screening Methods

The four major screening methods everyone should be aware of are:

- **Fecal Occult Blood Test (FOBT)**

- This is a low cost screening test that checks for hidden blood in stool, one of the early warning signs of colorectal cancer. The most prevalent form of this test requires handling of stool, dietary restrictions, and laboratory processing: three major barriers to compliance. With EZ Detect™, these common barriers to compliance are eliminated. EZ Detect™ is the only non-invasive FDA cleared FOBT that can be performed and produce results at home that has no dietary restrictions and no handling of stool. A positive FOBT result does not necessarily indicate colorectal cancer. There could be false positives or the test may also indicate ulcers, hemorrhoids, polyps, colitis, diverticulitis or fissures which may not show visible symptoms even though they are producing blood in the stool. EZ Detect™ can therefore serve as an early warning signal of other bowel troubles that need medical attention.
- A negative FOBT does not necessarily indicate that colorectal cancer does not exist since not all polyps bleed or bleed all the time.
- An FOBT cannot detect every colon problem or abnormality and does not replace an examination by a doctor or other diagnostic procedures. However, according to the University of Minnesota study, FOBTs are of great value in screening people for further examination and colonoscopy since FOBTs are such a low cost screening tool compared to colonoscopy. If there is a positive result with FOBT screening, the American College of Physicians recommends colonoscopy.
- In the United States, where colonoscopy is generally safe and accessible, the preferred strategy for evaluating a positive result on a fecal occult blood test is colonoscopy.
- Recommended FOBT screening frequency: annually.

- **Colonoscopy**

- A colonoscopy is generally considered the gold standard of care in screening. In this procedure (typically performed by a gastroenterologist) a flexible tube with a light and camera on the end (called an endoscope) is inserted into the rectum and can visualize the entire colon. Biopsies can be taken and if identified, polyps can be removed at the same time. This exam does not usually cause pain, although it can be uncomfortable. (Most people say the preparation the day before the exam is the worst part.) Patients are generally given medication through a vein to make them feel relaxed and sleepy.
- A colonoscopy usually is performed if someone is at high risk of colon cancer or after simpler tests (such as FOBT, sigmoidoscopy, DCBE or digital rectal exams) have found symptoms such as bleeding.
- Recommended colonoscopy screening frequency: Every 8 to 10 years starting at age 50, or more frequently as recommended by physician.

- **Sigmoidoscopy**

- A sigmoidoscopy is like a colonoscopy but only examines the lower third of the colon.

- **Double-Contrast Barium Enema (DCBE) or Barium X-Ray**

- This is an x-ray examination of the rectum and entire colon performed in a hospital or clinic. The patient is given an enema containing white dye or barium, followed by an

injection of air. The barium outlines the intestine and enables the doctor or health professional to take x-rays of the lower intestine.

- The disadvantage of the double contrast barium enema, however, according to the American College of Physicians, is that an abnormal examination will require subsequent colonoscopy. "Moreover, and in greater importance in our view, a barium enema may not detect large (>1 cm) adenomas in about 40% of cases."

REFERENCES:

- Cancer Facts and Figures 1999, The American Cancer Society
- Landis SH, Murray T, Bolden S, Wingo PA, Cancer Statistics, 1998. CA Cancer J Clin 1998;48:6-29
- Mayberry RM, Coates RJ, Hill HA, Click LA, et al, Determinants of black/white differences in colon cancer survival. JNCI 1995;87(22):1686-1693
- Harvard Center for Cancer Prevention, Harvard Report on Cancer Prevention Volume I, Causes of Human Cancer. Can Causes Control 1996-7 (SI):7-15
- Byers T, Levin B, Rothenberger D, Dodd GD, et al. American Cancer Society Guidelines for screening and surveillance for early detection of colorectal polyps and cancer. Update 1997, CA Cancer J Clin. 1997;47:154-160.
- Ransohoff DF, Lang CA, Screening for Colorectal Cancer with the Fecal Occult Blood Test:A Background Paper, Annals of Internal Medicine 1997, V.126, N10, 811-822
- Comparison of Self-Reported Fecal Occult Blood Testing with Automated Laboratory Records among Older Women in a Health Maintenance Organization. American Journal of Epidemiology 1999;150:617-21. (September 15, 1999)
- Ransohoff DF, Lang CA. Screening for colorectal cancer with the fecal occult blood test: a background paper. Ann Intern Med 1997;126:811-22.
- CDC. Screening for colorectal cancer -- United States, 1992-1993, and new guidelines. MMWR 1996;45:107-10.
- Jack S. Mandel, Timothy R. Church, Fred Ederer, John H. Bond, Colorectal Cancer Mortality: Effectiveness of Biennial Screening for Fecal Occult Blood Jnl of the National Cancer Institute Vol. 91, No. 5, 434-437, March 3, 1999
- Bresalier RS, Rothenberger D, The American Cancer Society Guidelines for Colorectal Cancer Screening: Have We Gone Too Far (Or Not Far Enough?) Gastroenterology 114:1341-1342, 1998
- Levin B. Colorectal Cancer Screening:Sifting Through the Evidence J Natl Cancer Inst 91:399-400, 1999
- Whelan, Elizabeth, American Council of Science and Health, Editorial:Saving Lives By Screening for Colon Cancer
- OnHealth:Risks for Colon Cancer, from publishers of New England Jnl of Medicine
- Jack S. Mandel, Timothy R. Church, Fred Ederer, John H. Bond, Colorectal Cancer Mortality: Effectiveness of Biennial Screening for Fecal Occult Blood Jnl of the National Cancer Institute Vol. 91, No. 5, 434-437, March 3, 1999