DIGESTIVE CENTER of the Palm Beaches

Colorectal Cancer

OVERVIEW

WHAT IS COLORECTAL CANCER?

Colorectal (large bowel) cancer is a disease in which malignant (cancer) cells form in the inner lining of the colon or rectum. Together, the colon and rectum make up the large bowel or large intestine. The large intestine is the last segment of the digestive system (the esophagus, stomach, and small intestine are the first three sections). The large bowel's main job is to reabsorb water from the contents of the intestine so that solid waste can be expelled into the toilet. The first several feet of the large intestine is the colon and the last 6 inches is the rectum.

Most colon and rectal cancers originate from benign wart-like growths on the inner lining of the colon or rectum called polyps. Not all polyps have the potential to transform into cancer. Those that do have the potential are called adenomas. It takes more than 10 years in most cases for an adenoma to develop into cancer. This is why some colon cancer prevention tests are effective even if done at 10-year intervals. This 10-year interval is too long, in some cases, such as in persons with ulcerative colitis or Crohn's colitis, and in persons with a strong family history of colorectal cancer or adenomas.

HOW COMMON IS COLORECTAL CANCER?

Colorectal cancer is the number 2 cancer killer in the United States, yet it is one of the most preventable types of cancer and often curable when detected early.
In the United States, colorectal cancer is the fourth most common cancer in men, after skin, prostate, and lung cancer. It is also the fourth most common cancer in women, after skin, breast, and lung cancer, according to the National Cancer Institute.
Estimated new cases and deaths from colon and rectal cancer in the United States in 2010:

- New cases: 102,900 (colon); 39,670 (rectal)
- Deaths: 51,370 (colon and rectal combined)

Source:National Cancer Institute

COLORECTAL CANCER SCREENING OPTIONS

WHAT ARE THE COLORECTAL CANCER SCREENING OPTIONS?

Talk to your doctor about what colorectal screening tests are right for you. Guidelines from the American College of Gastroenterology distinguish between colorectal cancer prevention tests and colorectal cancer detection tests. According to ACG, prevention tests are preferred over detection tests.

Preferred Colorectal Cancer Prevention Test: Colonoscopy

Colonoscopy every 10 years is the preferred colorectal cancer prevention test. For normal risk individuals, the American College of Gastroenterology recommends colonoscopy beginning at age 50, and age 45 for African Americans.

Preferred Cancer Detection Test: Fecal Immunochemical Test (FIT)

Annual fecal immunochemical testing is the preferred colorectal cancer detection test. FIT is a relatively new test that detects hidden blood in the stool. If results are positive, a colonoscopy is performed.
CT Colonography every 5 years
CT Colonography is an X-ray designed to look for colon polyps and cancers. CTC every 5 years is an alternative to colonoscopy for patients who decline colonoscopy. If polyps are detected, a regular colonoscopy is required to remove these pre-cancerous growths. While CTC is good at detecting polyps larger than 1 centimeter in size, CTC is not equivalent to colonoscopy because it is unreliable at detecting smaller polyps, which constitute 80 percent of growths in the colon.
Alternative Tests
Flexible Sigmoidoscopy every 5 to 10 years
Annual Hemoccult® Sensa®
Fecal DNA Testing every 3 Years

Source: American College of Gastroenterology 2009 Colorectal Cancer Screening Guideline

SYMPTOMS

WHAT ARE THE SYMPTOMS OF COLORECTAL CANCER?

Most early colorectal cancers produce no symptoms. This is why screening for colorectal cancer is so important. Symptoms of colorectal cancer vary depending on the location of the cancer within the colon or rectum, though there may be no symptoms at all. The prognosis tends to be worse in symptomatic as compared to asymptomatic individuals.

The most common presenting symptom of colorectal cancer is rectal bleeding. Cancers arising from the left side of the colon generally cause bleeding, or in their late stages may cause constipation, abdominal pain, and obstructive symptoms.

On the other hand, right-sided colon lesions may produce vague abdominal aching, but are unlikely to present with obstruction or altered bowel habit. Other symptoms such as weakness, weight loss, or anemia resulting from chronic blood loss may accompany cancer of the right side of the colon. You should promptly see your doctor when you experience any of these symptoms.

Remember to promptly see your doctor if you experience any of these symptoms:
New onset of abdominal pain
Blood in or on the stool
A change in stool caliber or shape
A change in typical bowel habits, constipation, diarrhea
Why should you get checked for Colorectal Cancer even if you have no symptoms?
Adenomas can grow for years and transform into cancer without producing any symptoms. By the time symptoms develop, it is often too late to cure the cancer, because it may have spread. Screening identifies cancers earlier and actually results in cancer prevention when it leads to removal of adenomas (pre-cancerous polyps).

CAUSES

CAUSES OF COLORECTAL CANCER

The cause of colorectal cancer in most cases is unclear. However, most colorectal cancers develop from polyps, which are abnormal growths in the colon. If polyps grow unnoticed and are not removed, they may become cancerous. Screening tests can find precancerous polyps so they can be removed before they turn into cancer. The development of more than 75-90 percent of colorectal cancer can be avoided through early detection and removal of pre-cancerous polyps.

RISK FACTORS

WHO IS AT RISK FOR COLORECTAL CANCER?

- Everyone age 50 and older. The average age to develop colorectal cancer is 70 years, and 93% of cases occur in persons 50 years of age or older. Current recommendations are to begin screening at age 50 if there are no risk factors other than age for colorectal cancers. A person whose only risk factor is their age is said to be at average risk.
- Men and women Men tend to get colorectal cancer at an earlier age than women, but women live longer so they 'catch up' with men and thus the total number of cases in men and women is equal.
- Anyone with a family history of colorectal cancer. If a person has a history of two or more first-degree relatives (parent, sibling, or child) with colorectal cancer, or any first-degree relatives diagnosed under age 60, the overall colorectal cancer risk is three to six times higher than that of the general population. For

those with one first-degree relative diagnosed with colorectal cancer at age 60 or older, there is an approximate two times greater risk of colon cancer than that observed in the general population. Special screening programs are used for those with a family history of colorectal cancer. A well-documented family history of adenomas is also an important risk factor.

- Anyone with a personal history of colorectal cancer or adenomas at any age, or cancer of endometrium (uterus) or ovary diagnosed before age 50. Persons who have had colorectal cancer or adenomas removed are at increased risk of developing additional adenomas or cancers. Women diagnosed with uterine or ovarian cancer before age 50 are at increased risk of colorectal cancer. These groups should be checked by colonoscopy at regular intervals, usually every 3 to 5 years. Woman with a personal history of breast cancer have only a very slight increase in risk of colorectal cancer.

COLORECTAL CANCER SCREENING FOR AFRICAN AMERICANS

African Americans are diagnosed with colorectal cancer at a younger age than other ethnic groups, and African Americans with colorectal cancer have decreased survival compared with other ethnic groups.

Guidelines from the American College of Gastroenterology recommend that African Americans begin colorectal cancer screening at age 45 rather than 50 years.
Data support the recommendation that African Americans should begin screening at a younger age because of the higher incidence of colorectal cancer and a greater prevalence of proximal or right-sided polyps and cancer in this population.

PREVENTION

WHAT CAN I DO TO PREVENT THE DEVELOPMENT OF COLORECTAL CANCER?

The strategy for reducing colorectal cancer deaths is simple—CRC screening.
For normal risk individuals, screening tests begin at age 50 and the preferred approach is a screening colonoscopy every 10 years; an alternate strategy consists of annual stool test for blood and a flexible sigmoidoscopic exam every 3 to 5 years.
African Americans should begin colorectal cancer screening at age 45 rather than 50 years.

Colonoscopic surveillance (also called screening colonoscopy) needs to be available at more frequent intervals for individuals at high risk for colon cancer (for instance, those with a personal history of colorectal cancer or adenomatous polyps; family history of colorectal cancer; non-hereditary polyposis; colorectal cancer; or a predisposing condition such as inflammatory bowel disease. (Medicare provides for surveillance colonoscopy no more frequently than once every two years for those at high risk.)

For both average and high risk individuals, all potential pre-cancerous polyps must be removed.

Recent observations suggest regular use of non-steroidal anti-inflammatory drugs or aspirin, reduce the chances of colorectal cancer death by 30-50%. These drugs also have risks, particularly intestinal bleeding, and patients should consult their physician as to whether regular use of these agents is appropriate. Folate, calcium, and post-menopausal estrogens each have a modest protective benefit against colon cancer. A high fiber (vegetables) and low fat diet, regular exercise, maintenance of normal body weight and cessation of smoking are also beneficial. None of the measures is as effective as or should replace colorectal cancer screening.

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