Colon and rectal cancer

Definition

Colon and rectal cancer, or colorectal cancer, is cancer that starts in the large intestine (colon) or the rectum (end of the colon).

Other types of cancer can affect the colon. These include lymphoma, carcinoid tumors, melanoma, and sarcomas. These are rare. In this article, colon cancer refers to colorectal cancer only.

Alternative Names

Colorectal cancer; Cancer - colon; Rectal cancer; Cancer - rectum; Adenocarcinoma - colon; Colon adenocarcinoma; Colon carcinoma

Causes

In the United States, colorectal cancer is one of the leading causes of deaths due to cancer. Early diagnosis can often lead to a complete cure.

Almost all colon cancers start in the lining of the colon and rectum. When doctors talk about colorectal cancer, this is usually what they are talking about.

There is no single cause of colon cancer. Nearly all colon cancers begin as noncancerous (benign) polyps, which slowly develop into cancer.

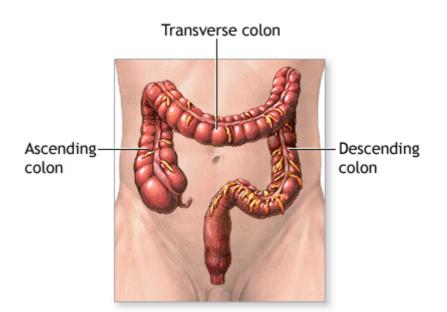
You have a higher risk for colon cancer if you:

- Are older than 60
- Are African American or of eastern European descent
- Eat a lot of red or processed meats
- Have colorectal polyps
- Have inflammatory bowel disease (Crohn disease or ulcerative colitis)
- · Have a family history of colon cancer

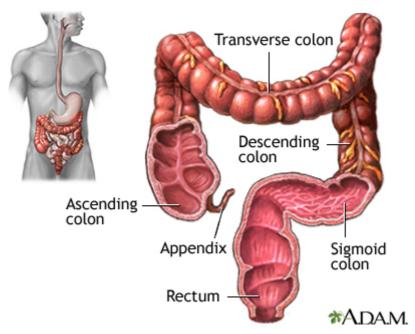
Some inherited diseases also increase the risk of developing colon cancer. One of the most common is called familial adenomatous polyposis (FAP).

What you eat may play a role in getting colon cancer. Colon cancer may be linked to a high-fat, low-fiber diet and to a high intake of red meat. Some studies have found that the risk does not drop if you switch to a high-fiber diet, so this link is not yet clear.

Smoking cigarettes and drinking alcohol are other risk factors for colorectal cancer.







Symptoms

Many cases of colon cancer have no symptoms. If there are symptoms, the following may indicate colon cancer:

- Abdominal pain and tenderness in the lower abdomen
- Blood in the stool
- Diarrhea, constipation, or other change in bowel habits
- Narrow stools
- · Weight loss with no known reason

Exams and Tests

Through screening tests, colon cancer can be detected before symptoms develop. This is when the cancer is most curable.

Your doctor will perform a physical exam and press on your belly area. The physical exam rarely shows any problems, although the doctor may feel a lump (mass) in the abdomen. A rectal exam may reveal a mass in people with rectal cancer, but not colon cancer.

A fecal occult blood test (FOBT) may detect small amounts of blood in the stool. This may suggest colon cancer. A sigmoidoscopy, or more likely, a colonoscopy, will be done to evaluate the cause of blood in your stool.

Only a full colonoscopy can see the entire colon. This is the best screening test for colon cancer.

Blood tests may be done for those diagnosed with colorectal cancer, including:

- Complete blood count (CBC) to check for anemia
- Liver function tests

If you are diagnosed with colorectal cancer, more tests will be done to see if the cancer has spread. This is called staging. CT or MRI scans of the abdomen, pelvic area, or chest may be used to stage the cancer. Sometimes, PET scans are also used.

Stages of colon cancer are:

- Stage 0: Very early cancer on the innermost layer of the intestine
- Stage I: Cancer is in the inner layers of the colon
- Stage II: Cancer has spread through the muscle wall of the colon
- Stage III: Cancer has spread to the lymph nodes
- Stage IV: Cancer has spread to other organs outside the colon

Blood tests to detect tumor markers, such as carcinoembryonic antigen (CEA) may help the doctor follow you during and after treatment.

Treatment

Treatment depends on many things, including the stage of the cancer. Treatments may include:

- Surgery to remove the tumor
- Chemotherapy to kill cancer cells
- Radiation therapy to destroy cancerous tissue
- Targeted therapy to keep cancer from growing and spreading

SURGERY

Stage 0 colon cancer may be treated by removing the tumor. This is often done using colonoscopy. For stages I, II, and III cancer, more extensive surgery is needed to remove the part of the colon that is cancerous. This surgery is called colon resection (colectomy).

CHEMOTHERAPY

Almost all people with stage III colon cancer receive chemotherapy after surgery for 6 to 8 months. This is called adjuvant chemotherapy. Even though the tumor was removed, chemotherapy is given to treat any cancer cells that may be left.

Chemotherapy is also used to improve symptoms and prolong survival in people with stage IV colon cancer.

You may receive just one type of medicine or a combination of medicines.

RADIATION

Radiation therapy is sometimes used for colon cancer.

For people with stage IV disease that has spread to the liver, treatment directed at the liver can be used. This may include:

- Burning the cancer (ablation)
- Delivering chemotherapy or radiation directly into the liver
- Freezing the cancer (cryotherapy)
- Surgery

TARGETED THERAPY

- Targeted treatment zeroes in on specific targets (molecules) in cancer cells. These targets
 play a role in how cancer cells grow and survive. Using these targets, the drug disables the
 cancer cells so they cannot spread. Targeted therapy may be given as pills or may be
 injected into a vein.
- You may have targeted therapy along with surgery, chemotherapy, or radiation treatment.

Support Groups

You can ease the stress of illness by joining a colon cancer support group. Sharing with others who have common experiences and problems can help you not feel alone.

Outlook (Prognosis)

In many cases, colon cancer is treatable when caught early.

How well you do depends on many things, especially the stage of the cancer. When treated at an early stage, many people survive at least 5 years after diagnosis. This is called the 5-year survival rate.

If the colon cancer does not come back (recur) within 5 years, it is considered cured. Stages I, II, and III cancers are considered possibly curable. In most cases, stage IV cancer is not considered curable, although there are exceptions.

Possible Complications

Complications may include:

- Blockage of the colon, causing bowel obstruction
- Cancer returning in the colon
- Cancer spreading to other organs or tissues (metastasis)
- Development of a second primary colorectal cancer

When to Contact a Medical Professional

Call your health care provider if you have:

- Black, tar-like stools
- · Blood during a bowel movement
- Change in bowel habits
- Unexplained weight loss

Prevention

Colon cancer can almost always be caught by colonoscopy in its earliest and most curable stages. Almost all men and women age 50 and older should have a colon cancer screening. People at higher risk may need earlier screening.

Colon cancer screening can often find polyps before they become cancerous. Removing these polyps may prevent colon cancer.

Changing your diet and lifestyle is important. Medical research suggests that low-fat and high-fiber diets may reduce your risk for colon cancer.

Some studies have reported that NSAIDs (aspirin, ibuprofen, naproxen, and celecoxib) may help reduce the risk for colorectal cancer. But these medicines can increase your risk of bleeding and heart problems. Your provider can tell you more about the risks and benefits of the medicines and other ways that help prevent colorectal cancer.

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Review Date: 1/19/2018

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