

Colon Cancer

Definition

Colon cancer is cancer that starts in the large intestine (colon) or the rectum (end of the colon). Such cancer is sometimes referred to as "colorectal cancer."

Other types of colon cancer, such as lymphoma, carcinoid tumors, melanoma, and sarcomas, are rare. In this article, use of the term "colon cancer" refers to colon carcinoma and not these rare types of colon cancer.

Alternative Names

Colorectal cancer; Cancer - colon

Causes

According to the American Cancer Society, colorectal cancer is one of the leading causes of cancer-related deaths in the United States. (However, early diagnosis often leads to a complete cure.)

There is no single cause for 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 have:

- Cancer elsewhere in the body
- Colorectal polyps
- Crohn's disease
- Family history of colon cancer
- Personal history of breast cancer
- Ulcerative colitis

Certain genetic syndromes also increase the risk of developing colon cancer.

What you eat may play a role in your risk of colon cancer. Colon cancer may be associated with a high-fat, low-fiber diet and red meat. However, some studies found that the risk does not drop if you switch to a high-fiber diet, so the cause of the link is not yet clear.

Smoking cigarettes is another risk factor for colorectal cancer.

Symptoms

Many cases of colon cancer have no symptoms. The following symptoms, however, may indicate colon cancer:

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

Exams and Tests

With proper screening, colon cancer can be detected before symptoms develop, when it 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 mass in the abdomen. A rectal exam may reveal a mass in patients with rectal cancer, but not colon cancer.

Imaging tests to diagnose colorectal cancer include:

- Colonoscopy
- Sigmoidoscopy

Note: Only colonoscopy can see the entire colon.

A fecal occult blood test (FOBT) may detect small amounts of blood in the stool, which could suggest colon cancer. However, this test is often negative in patients with colon cancer. For this reason, a FOBT must be done along with colonoscopy or sigmoidoscopy. It is also important to note that a positive FOBT doesn't necessarily mean you have cancer.

A complete blood count may show signs of anemia with low iron levels.

If your doctor learns that you do have colorectal cancer, more tests will be done to see if the cancer has spread. This is called staging.

- 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

Treatment

Treatment depends partly on the stage of the cancer. In general, treatments may include:

- Chemotherapy to kill cancer cells
- Surgery to remove cancer cells

- Radiation therapy to destroy cancerous tissue

Stage 0 colon cancer may be treated by removing the cancer cells, often during a colonoscopy. For stages I, II, and III cancer, more extensive surgery is needed to remove the part of the colon that is cancerous. (See: Colon resection)

There is some debate as to whether patients with stage II colon cancer should receive chemotherapy after surgery. You should discuss this with your oncologist.

Almost all patients with stage III colon cancer should receive chemotherapy after surgery for approximately 6 - 8 months. The chemotherapy drug 5-fluorouracil has been shown to increase the chance of a cure in certain patients.

Chemotherapy is also used to treat patients with stage IV colon cancer. Irinotecan, oxaliplatin, and 5-fluorouracil are the three most commonly used drugs. In addition, monoclonal antibodies, including cetuximab (Erbix), panitumumab (Vectibix), and bevacizumab (Avastin) have been used alone or in combination with chemotherapy.

You may receive just one type, or a combination of the drugs. Capecitabine is a chemotherapy drug taken by mouth, and is similar to 5-fluorouracil.

For patients with stage IV disease that has spread to the liver, various treatments directed specifically at the liver can be used. This may include:

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

Although radiation therapy is occasionally used in patients with colon cancer, it is usually used in combination with chemotherapy for patients with stage III rectal cancer.

Support Groups

For additional resources and information, see colon cancer support groups.

Outlook (Prognosis)

Colon cancer is, in almost all cases, a treatable disease if caught early.

How well you do depends on many things, including the stage of the cancer. In general, when treated at an early stage, the vast majority of patients survive at least 5 years after their diagnosis. (This is called the 5-year survival rate.) However, the 5-year survival rate drops considerably once the cancer has spread.

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

Possible Complications

- 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

Prevention

The death rate for colon cancer has dropped in the last 15 years. This may be due to increased awareness and screening by colonoscopy.

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

For information on this procedure, see:

- Colon cancer screening
- Colonoscopy

Colon cancer screening can find precancerous polyps. Removing these polyps may prevent colon cancer.

Dietary and lifestyle modifications are important. Some evidence suggests that low-fat and high-fiber diets may reduce your risk of colon cancer.

The U.S. Preventive Services Task Force recommends against taking aspirin or other anti-inflammatory medicines to prevent colon cancer if you have an average risk of the disease -- even if someone in your family has had the condition. Taking more than 300 mg a day of aspirin and similar drugs may cause dangerous gastrointestinal bleeding and heart problems in some people.

Although low-dose aspirin may help reduce your risk of other conditions, such as heart disease, it does not lower the rate of colon cancer.