

# **Colon cancer**

### **Overview**

Colon cancer is a type of cancer that begins in the large intestine (colon). The colon is the final part of the digestive tract.

Colon cancer typically affects older adults, though it can happen at any age. It usually begins as small, noncancerous (benign) clumps of cells called polyps that form on the inside of the colon. Over time some of these polyps can become colon cancers.

Polyps may be small and produce few, if any, symptoms. For this reason, doctors recommend regular screening tests to help prevent colon cancer by identifying and removing polyps before they turn into cancer.

If colon cancer develops, many treatments are available to help control it, including surgery, radiation therapy and drug treatments, such as chemotherapy, targeted therapy and immunotherapy.

Colon cancer is sometimes called colorectal cancer, which is a term that combines colon cancer and rectal cancer, which begins in the rectum.

# **Symptoms**

Signs and symptoms of colon cancer include:

- A persistent change in your bowel habits, including diarrhea or constipation or a change in the consistency of your stool
- Rectal bleeding or blood in your stool
- Persistent abdominal discomfort, such as cramps, gas or pain
- A feeling that your bowel doesn't empty completely
- Weakness or fatigue
- Unexplained weight loss

Many people with colon cancer experience no symptoms in the early stages of the disease. When symptoms appear, they'll likely vary, depending on the cancer's size and location in your large intestine.

#### When to see a doctor

If you notice any persistent symptoms that worry you, make an appointment with your doctor.

Talk with your doctor about when to begin colon cancer screening. Guidelines generally recommend that colon cancer screenings begin around 50. Your doctor may recommend more frequent or earlier screening if you have other risk factors, such as a family history of the disease.

#### **Causes**

Doctors aren't certain what causes most colon cancers.

In general, colon cancer begins when healthy cells in the colon develop changes (mutations) in their DNA. A cell's DNA contains a set of instructions that tell a cell what to do.

Healthy cells grow and divide in an orderly way to keep your body functioning normally. But when a cell's DNA is damaged and becomes cancerous, cells continue to divide — even when new cells aren't needed. As the cells accumulate, they form a tumor.

With time, the cancer cells can grow to invade and destroy normal tissue nearby. And cancerous cells can travel to other parts of the body to form deposits there (metastasis).

### **Risk factors**

Factors that may increase your risk of colon cancer include:

- Older age. Colon cancer can be diagnosed at any age, but a majority of people with colon cancer are older than 50. The rates of colon cancer in people younger than 50 have been increasing, but doctors aren't sure why.
- African-American race. African-Americans have a greater risk of colon cancer than do people of other races.
- A personal history of colorectal cancer or polyps. If you've already had colon cancer or noncancerous colon polyps, you have a greater risk of colon cancer in the future.
- **Inflammatory intestinal conditions.** Chronic inflammatory diseases of the colon, such as ulcerative colitis and Crohn's disease, can increase your risk of colon cancer.
- Inherited syndromes that increase colon cancer risk. Some gene mutations passed through generations of your family can increase your risk of colon cancer significantly. Only a small percentage of colon cancers are linked to inherited genes. The most common inherited syndromes that increase colon cancer risk are familial adenomatous polyposis (FAP) and Lynch syndrome, which is also known as hereditary nonpolyposis colorectal cancer (HNPCC).
- Family history of colon cancer. You're more likely to develop colon cancer if you have a blood relative who has had the disease. If more than one family member has colon cancer or rectal cancer, your risk is even greater.
- Low-fiber, high-fat diet. Colon cancer and rectal cancer may be associated with a typical Western diet, which is low in fiber and high in fat and calories. Research in this area has had

mixed results. Some studies have found an increased risk of colon cancer in people who eat diets high in red meat and processed meat.

- A sedentary lifestyle. People who are inactive are more likely to develop colon cancer. Getting regular physical activity may reduce your risk of colon cancer.
- Diabetes. People with diabetes or insulin resistance have an increased risk of colon cancer.
- **Obesity.** People who are obese have an increased risk of colon cancer and an increased risk of dying of colon cancer when compared with people considered normal weight.
- Smoking. People who smoke may have an increased risk of colon cancer.
- Alcohol. Heavy use of alcohol increases your risk of colon cancer.
- Radiation therapy for cancer. Radiation therapy directed at the abdomen to treat previous cancers increases the risk of colon cancer.

#### **Prevention**

#### Screening colon cancer

Doctors recommend that people with an average risk of colon cancer consider colon cancer screening around age 50. But people with an increased risk, such as those with a family history of colon cancer, should consider screening sooner.

Several screening options exist — each with its own benefits and drawbacks. Talk about your options with your doctor, and together you can decide which tests are appropriate for you.

#### Lifestyle changes to reduce your risk of colon cancer

You can take steps to reduce your risk of colon cancer by making changes in your everyday life. Take steps to:

- Eat a variety of fruits, vegetables and whole grains. Fruits, vegetables and whole grains contain vitamins, minerals, fiber and antioxidants, which may play a role in cancer prevention. Choose a variety of fruits and vegetables so that you get an array of vitamins and nutrients.
- **Drink alcohol in moderation, if at all.** If you choose to drink alcohol, limit the amount of alcohol you drink to no more than one drink a day for women and two for men.
- Stop smoking. Talk to your doctor about ways to quit that may work for you.
- Exercise most days of the week. Try to get at least 30 minutes of exercise on most days. If you've been inactive, start slowly and build up gradually to 30 minutes. Also, talk to your doctor before starting any exercise program.
- Maintain a healthy weight. If you are at a healthy weight, work to maintain your weight by combining a healthy diet with daily exercise. If you need to lose weight, ask your doctor about healthy ways to achieve your goal. Aim to lose weight slowly by increasing the amount of exercise you get and reducing the number of calories you eat.

## Colon cancer prevention for people with a high risk

Some medications have been found to reduce the risk of precancerous polyps or colon cancer. For instance, some evidence links a reduced risk of polyps and colon cancer to regular use of aspirin or aspirin-like drugs. But it's not clear what dose and what length of time would be needed to reduce the risk of colon cancer. Taking aspirin daily has some risks, including gastrointestinal bleeding and ulcers.

These options are generally reserved for people with a high risk of colon cancer. There isn't enough evidence to recommend these medications to people who have an average risk of colon cancer.

If you have an increased risk of colon cancer, discuss your risk factors with your doctor to determine whether preventive medications are safe for you.

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