

Colon cancer is the second leading cause of cancer deaths in United States. Only lung cancer is more deadly. This year we can expect about 134,000 new cases of colon cancer and 55,000 deaths from colon cancer. The good news is that it is surprisingly easy to significantly lower your risk of this disease.

Colon cancer is a malignant growth that occurs on the inner wall of the colon or rectum. It is recognized that colon cancer usually begins many years earlier as a small noncancerous growth called a polyp, which grows on the inner wall of the colon. Polyps arise from genetic mutations in the DNA of the cells that line the colon. All of the risk factors for developing these genetic mutations are not known, but genetics plays an important role. Over time some polyps will grow larger until they develop into colon cancer. Although there are always exceptions, current data suggests that this malignant transformation is slow and may take 10 years or longer.

### What is a Colon Polyp?

A colon polyp is an abnormal tissue growth which arises on the inner surface of the colon. The colon, or large intestine, is six feet long and looks like a hollow pipe with a ribbed inner surface. For many reasons, some individuals grow polyps on the inner wall of the colon. Colon polyps are found in one of two shapes; pedunculated, polyps on stems or stalks that look like mushrooms; or sessile, which are flat and sometimes more difficult to find and remove.

### Cancer Risk Associated With Colon Polyps

Colon polyps are important since some may turn into colon cancer over time. While not every colon polyp turns to cancer, it is believed that almost every colon cancer begins as a small, non-cancerous polyp. Fortunately, during colonoscopy these polyps can be identified and removed – thus preventing a possible colon cancer.

### Different Tissue Types of Polyps

There are basically four types of polyps that commonly occur within the colon:

**Inflammatory** - Most often found in patients with ulcerative colitis or Crohn's disease. Often called "pseudopolyps" (false polyps), they are not true polyps, but just a reaction to chronic inflammation of the colon wall. They are not the type that turns to cancer. They are usually biopsied to verify type.

**Hyperplastic** - A common type of polyp which is usually very small and found in the rectum. They are considered to be low risk for cancer.

**Tubular adenoma or adenomatous polyp** - This is the most common type of polyp and the one referred to most often when a doctor speaks of colon polyps. About 70 percent of polyps removed are of this type. Adenomas carry a definite cancer risk which rises as the polyp grows larger. Adenomatous polyps usually cause no symptoms, but if detected early they can be removed during colonoscopy before any cancer cells form. The good news is that polyps grow slowly and may take years to turn into cancer. Patients with a history of adenomatous polyps must be periodically reexamined.

**Villous adenoma or tubulovillous adenoma** - About 15 percent of polyps removed are of this type. This is a much more serious type of polyp that has a very high cancer risk as it grows larger. Larger sessile villous adenomas may require surgery for complete removal. Follow up depends on size and completeness of removal.

### Colon Cancer Risk Factors

Family history of colon cancer is a well-recognized risk factor; however, most cases of colon cancer (over 75 percent) are not associated with any risk factors whatsoever. Despite a popular misconception, colon cancer is also an equal opportunity disease – men and women are equally affected. Most cases are diagnosed after the age of 50 and the risk increases with age. The most common symptom of colon cancer is no symptom at all. You could have a polyp, or even an early cancer, growing in your colon right now and feel perfectly fine. There are no symptoms such as pain, bleeding, or change in bowel habits to warn you – until it is too late. By the time that a colon cancer is large enough to change your bowel habits, it may already be too late.

Left undetected, colon cancer eventually penetrates through the outer colon wall and spreads to other organs, most often lymph nodes and the liver. It has been well demonstrated that if colon cancer is caught in the earliest stages the cure rate could be increased to 90 percent. Even better, it has been repeatedly shown that by detecting and removing colon polyps before they develop into cancer, colon cancer can be prevented. Most polyps can now be painlessly removed during a simple 20 minute outpatient "scope" procedure called colonoscopy. To decrease your risk of colon cancer, you need to have any colon polyps found and removed before they become cancerous.

## Colon Cancer Screening

To reduce your personal risk, you should undergo an active program of periodic colon checkups before you have symptoms. Just as you would for routine mammograms and prostate exams, you must go see your doctor when you feel well. Here are three different situations that might arise:

**If you have symptoms** - Screening programs for colon polyps and cancer are designed for patients who have no symptoms. If you have symptoms such as rectal bleeding, altered bowel habit, have been found to have unexplained iron deficiency anemia or a positive test for hidden blood in your stool (Hemoccult), you need to see your doctor for a full investigation, not a screening exam.

**Average-risk individuals with no symptoms** - Most people fit into this category. For those with no symptoms and no high risk factors, it is recommended that screening begin at age 50. At a minimum, this should include a three day Hemoccult card test for hidden blood in the stool every year and a flexible sigmoidoscopy, “short scope test,” every five years. Recently, it has been shown that this regimen still misses up to 30 percent of colon cancer and even more polyps. This is why most professional health organizations – like the American Cancer Society – now endorse colonoscopy as a primary screening method. There are three advantages to colonoscopy. First is higher accuracy since the entire colon is visualized. Second, with colonoscopy most polyps can be removed when found. And third, if normal, screening colonoscopy need not be repeated as often.

**High-risk individual** - While we are all at risk, some of us have a higher risk than others because of certain factors in our medical history. Those who fall into a high risk category should also be screened, but at an earlier age such as 40. The appropriate test should be chosen by your physician depending on the circumstances. Most often, a colonoscopy “full scope” exam is done.

If you fall into one of these high risk categories, it is even more important that you begin a regular screening program. High risk factors include:

- Personal history of colon polyps
- Personal history of colon cancer
- Ulcerative or Crohn’s colitis
- Personal history of breast or uterine cancer
- Family history of colon cancer
- Family history of precancerous polyps

## Preventing Colon Polyps

There is no reliable way to prevent further colon polyps. However, the risk of polyps can be lowered somewhat by adding more fiber, extra calcium, and 400 micrograms (mcg.) of the vitamin folic acid to the daily diet. Low dose aspirin may also be protective. One study demonstrated a 40 percent drop in the incidence of recurrent polyps by taking an 81 mg baby aspirin daily. Interestingly, higher doses were less protective. But since polyps can not be reliably prevented, periodic colonoscopy exams are recommended.

## Preventing Colon Cancer

If you have a history of adenomatous polyps, your risk of future polyps is about 60 percent – and there are usually no warning symptoms that colon polyps are present. With periodic colonoscopy exams, you can maximize your chances that any new polyp will be detected and removed before cancer cells develop. Rarely, a colon cancer may develop between colonoscopy exams. Fortunately, they are usually small and curable by surgery. Periodic colonoscopy can significantly reduce your risk of colon cancer. Ask your doctor when your next colonoscopy should be done.

## The Importance of Getting Your Colon Checked

Colon cancer is one of the most curable and preventable forms of cancer. When detected early, more than 90 percent of patients can be cured. Sadly, recent studies show that only about 12 percent of adults ever bother to have a colon examination. As an individual, you can take charge of your health and dramatically reduce your risk of getting colon cancer by having regular examinations before symptoms develop. Following these simple guidelines can keep you healthy to enjoy the good life you have worked so hard to create.