

News to Digest

Health tips from your Gastroenterologist...



Digestive
Health &
Nutrition

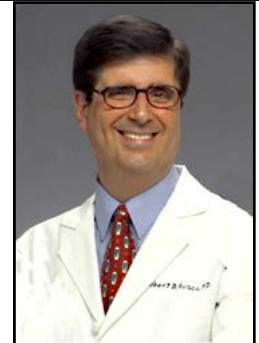
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WHAT IS A COLON POLYP?

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Your doctor may have recently told you that you have a colon polyp. It may have already been removed or destroyed during a colonoscopy. The information below will answer questions you may have about this condition.

What is a colon polyp?

A colon polyp is a benign tumor or growth which grows on the inner surface of the colon. Amazingly, from mouth to rectum, the human intestinal tract averages about 30 feet in length. The last six feet is called the colon, or large intestine. Like a piece of pipe, the colon is hollow and the inner surface is normally smooth.

For unknown reasons, some individuals grow polyps, or small lumps of tissue, on the inner wall of the colon. A colon polyp is a small tumor and there may be single or multiple polyps. The cause is not known, but the risk of having colon polyps increases with age. At age 50, the risk of polyps averages about 30%, but not all polyps turn to cancer.

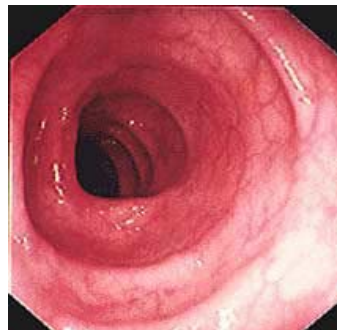
What is a tumor?

All tissues of the body are made up of millions of tiny individual cells. In health, there is a delicate balance. Old cells are constantly dying and are replaced by new healthy cells. If too many new cells form, they create a lump or mass which is called a tumor. *Tumors can be benign or malignant.*

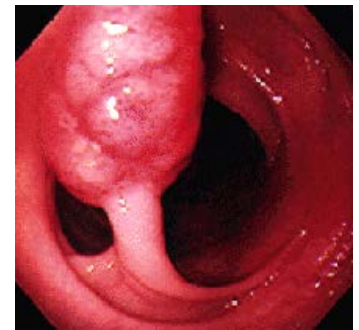
Benign tumors are not cancer. They can usually be removed and, in most cases, they do not grow back. Cells from benign tumors do not spread to other parts of the body. Most importantly, benign tumors are rarely a

threat to life. Malignant tumors are cancer. Cells in these tumors are abnormal and they continue to divide uncontrollably. Without treatment, they can invade and spread to nearby tissues and organs. When a cancer spread to other organs, it is called metastatic.

What does a polyp look like?



Normal Colon Lining



Pedunculated Polyp

Colon polyps are found in one of two shapes. Polyps on stems or stalks look like mushrooms and are called pedunculated. During colonoscopy, a special wire snare is placed around the stalk, and under computer control, painless electrical current cuts and cauterizes the polyp stalk to prevent bleeding. When polyps grow directly onto the inner wall of the colon with no stalk, they are called sessile and are much more difficult to remove.



Sessile Polyp (no stalk)

Why remove polyps if they are benign?

Removing colon polyps is important, since some turn into colon cancer over time. While not every colon polyp turns to cancer, it is felt that almost every colon cancer begins as a small non-cancerous polyp. During colonoscopy, polyps can be identified and removed *before* they turn into cancer. If a polyp is large enough, tissue is usually retrieved and sent for biopsy to determine the exact type of polyp. There are five types of polyps that commonly occur within the colon:

1. 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.

2. Hyperplastic

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

3. 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% of polyps removed are of this type. Adenomas carry a definite cancer risk which increases 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.

4. Villous adenoma or tubulovillous adenoma

About 15% 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. Often they are larger and sessile and not on a stem making removal more difficult. Smaller ones can be removed in piecemeal fashion - sometimes over several colonoscopies. Larger sessile villous adenomas may require surgery for complete removal. Follow up depends on size and completeness of removal.

5. Sessile serrated adenoma

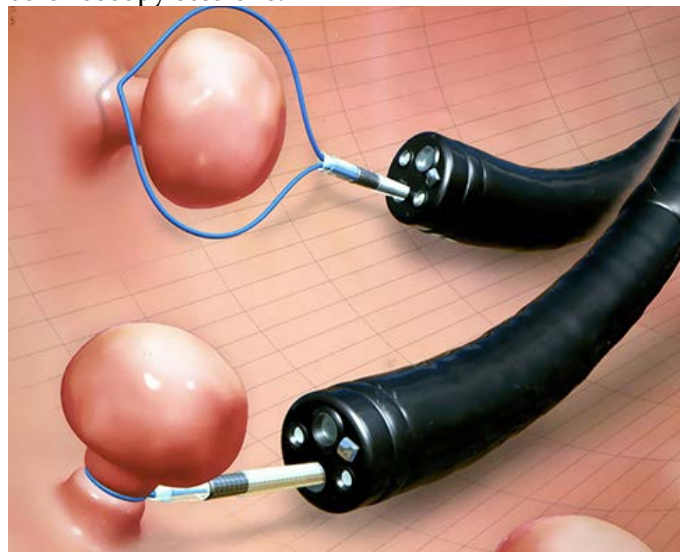
Serrated polyps have a saw tooth appearance under the microscope which is why they are called "serrated." They are usually located in the right side of the colon and may hide under a mucous cap. Some polyps are called traditional serrated, and look a little different under the microscope. Both types need to be removed from your colon.

What is dysplasia?

Dysplasia is halfway between benign and cancer - just like an abnormal Pap smear that isn't cancer yet. When removed and biopsied, both adenomas and villous adenomas may contain abnormal cells that are "almost cancer." Dysplastic polyps can be further divided into low grade dysplasia and the more severe high grade dysplasia. This is a serious finding and may be a marker for malignancy.

How are colon polyps removed?

During colonoscopy, it is not possible to reliably determine which colon polyps are headed for cancer and which are not, so when a polyp is found during colonoscopy, it is usually removed. Small sessile polyps can be removed with special biopsy forceps that are passed down the colonoscope through a hollow channel. The tissue is then retrieved for analysis. Pedunculated polyps are usually removed with the wire snare and then retrieved for study. Large sessile polyps have no stalk and must be carefully removed, often in pieces with the wire snare. To avoid damage to the colon wall, this is sometimes done over several colonoscopy sessions.



What are the stages of colon cancer?

Colon polyps usually cause no symptoms. Without screening and early detection, they may be silent for many years, slowly growing larger day by day. Eventually, the cells become malignant. This is called adenocarcinoma of the colon or colon cancer. As time goes by, the cancer may spread. Then symptoms become obvious, but it is too late. There are 6 stages of colon cancer, each more serious than the one before:

Stage 0 - This is the best stage. There is no cancer. This is a precancerous type of polyp (see types of polyps 3, 4, 5) . This is the best time to intervene by removing the polyp BEFORE it turns to cancer. This is why the American Cancer Society suggests screening colonoscopy examinations.

Carcinoma in situ- When removed and biopsied, some adenomas or villous adenomas are found to harbor a small focus of actual cancer cells. The cancer is found only on the very surface of the polyp and has not yet invaded the central core. This earliest stage is also called carcinoma in situ and carries the best prognosis.

Stage 1 - the cancer is localized to the inner lining of colon.

Stage 2 - the cancer is eating into the wall of the colon.

Stage 3 - the cancer has eaten through the wall and spread to the lymph glands on the outside of the colon.

Stage 4 - the cancer has overflowed the lymph glands and spread beyond, usually into the liver.



Examples of colon cancer

Can I reduce my risk of colon polyps?

There is no reliable way to prevent further colon polyps. However, the risk of polyps may 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. However, this has not been generally recommended for this indication alone as even low dose aspirin can increase the risk of bleeding. Since there is no way to reliably prevent colon polyps, periodic colonoscopy exams are recommended.

Center for Digestive Health & Nutrition

The Center for Digestive Health & Nutrition is a private medical practice in Moon Township, PA with six experienced gastroenterologists and staff that is dedicated to the prevention and treatment of digestive disorders.

Our physicians have been serving the needs of those in Western Pennsylvania and surrounding areas since 1977 with a combined medical staff clinical experience of over 200 years. We have cared for tens of thousands of individuals with digestive problems.

We fully understand the very sensitive nature of digestive illness and realize that each case is unique. Our objective is to consistently deliver high quality personal care in an efficient, private, and patient friendly environment. We are very proud of the care we provide our patients and would be honored to care for you and your family should any digestive issues arise...

For more information, give us a call at 412.262.1000 or access our website at www.gihealth.com.

How can I reduce my risk of colon cancer?

The answer is *colonoscopy, colonoscopy, colonoscopy...* If you are a polyp former, your risk of future polyps is about 60% - and there are no warning symptoms of colon polyps to guide you. The measures described above may be of benefit, but can't reliably prevent future polyps. 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 dying from colon cancer.

American Cancer Society Guidelines

Current recommendations are to begin screening for colon polyps and cancer at age 50. If the colonoscopy is normal and there are no symptoms, it should be repeated about every 10 years. If polyps are found, much more frequent exams are suggested based on the results. Individuals who have a family history of colon cancer or polyps should begin a program of screening colonoscopy about 10 years earlier and be tested at least every 5 years, if normal.