**GENERAL INFORMATION**

A **colonoscopy** is a procedure done to visualize the inside of the colon using a long, thin, flexible tube with a camera at the tip, which transmits images to a video monitor. During the procedure, the doctor can remove polyps and other tissues for biopsy. As an alternative, virtual colonoscopy uses techniques like CT scans and MRI to produce 2- or 3-dimensional images of the colonic lining. Both conventional colonoscopy and virtual colonoscopy require bowel preparation. Although a virtual colonoscopy does not require sedation and is less invasive, one drawback is that it does not allow polypectomy (polyp removal) or the removal of adjacent tissues for a biopsy. If large polyps are detected on virtual colonoscopy, a conventional colonoscopy (with the tube) will be required.

**Colorectal cancer** is the third most common cancer and the third leading cause of cancer death in the US. Approximately one in three patients who develop colorectal cancer dies of this disease. **Colorectal polyps** are small growths on the lining of the large bowel. Two thirds of the polyps are adenomatous, and one third are hyperplastic. These cannot be distinguished reliably by gross appearance; biopsy is required for diagnosis. Most colorectal cancers arise from adenomatous polyps. Hyperplastic polyps usually do not progress to cancer. Removal of adenomatous polyps prevents cancer. The National Polyp Study Work Group, for example, followed 1418 patients in whom colonoscopic examination led to the removal of one or more polyps. During a mean follow-up of six years, the incidence of colon cancer was 90% lower than in patients who had polyps that were not removed and 76% lower than in the general population.

**Screening colonoscopy** aims to identify polyps or early cancers in patients without any specific complaints. It is recommended in people 50 years or older. More recent guidelines recommend screening at age 45 for African American patients. If you have a first degree relative with colon cancer, you should have the first colonoscopy at 40 years of age, or 10 years earlier than the age of your relative at the time of his/her diagnosis, whichever comes first.

**DO I NEED TO HAVE A SPECIAL PREPARATION?**

**YES !!!**

Thorough cleansing of the bowel is necessary before a colonoscopy. If the bowel is not cleansed properly, the remaining stool can hide small polyps or even cancers. If your colon is not cleansed properly, your doctor will ask you to have a repeat colonoscopy at a short interval. For instructions regarding bowel cleansing, please see the attached “Colonoscopy preparation-instructions”.

“**The bad taste of the bowel prep is good for you”**: the unpleasant taste of the laxative solution is given by the salts which prevent dehydration, not due to laxative (think of the bowel prep as a combination of tasteless laxative causing diarrhea and Pedialyte to prevent dehydration).
HOW IS IT DONE?

For the colonoscopy, you will lay on your left side on the examining table. You will be given pain medication and a moderate sedative to keep you comfortable and help you relax during the exam. The doctor and a nurse will monitor your blood pressure and oxygen level, look for any signs of discomfort, and make adjustments as needed.

The doctor will then insert a long, flexible, lighted tube into your rectum and slowly guide it into your colon. The tube is called a colonoscope (koh-lon-oh-skope). The scope transmits an image of the inside of the colon onto a video screen so the doctor can carefully examine the lining of the colon. The scope bends so the doctor can move it around the curves of your colon.

You may be asked to change positions at times so the doctor can more easily move the scope to better see the different parts of your colon. The scope blows air into your colon and inflates it, which helps give the doctor a better view. Most patients do not remember the procedure.

If polyps are found, they will be removed using tiny tools passed through the scope. Most polyps are not cancerous, but they could turn into cancer. Just looking at a polyp is not enough to tell if it is cancerous. The polyps are sent to a lab for testing. By identifying and removing polyps, a colonoscopy likely prevents most cancers from forming. The doctor can also remove tissue samples to test in the lab for diseases of the colon (biopsy). In addition, if any bleeding occurs in the colon, the doctor can pass a laser, heater probe, electrical probe, or special medicines through the scope to stop the bleeding. The tissue removal and treatments to stop bleeding usually do not cause pain. In many cases, a colonoscopy allows for accurate diagnosis and treatment of colon abnormalities without the need for a major operation.

During the procedure you may feel mild cramping. You can reduce the cramping by taking several slow, deep breaths. When the doctor has finished, the colonoscope is slowly withdrawn while the lining of your bowel is carefully examined. Bleeding and puncture of the colon are possible but uncommon complications of a colonoscopy.

A colonoscopy usually takes 15 to 45 minutes. The sedative and pain medicine should keep you from feeling much discomfort during the exam. You may feel some cramping or the sensation of having gas after the procedure is completed, but it usually stops within an hour. You will need to remain at the colonoscopy facility for 1 to 2 hours so the sedative can wear off.

Rarely, some people experience severe abdominal pain, fever, bloody bowel movements, dizziness, or weakness afterward. If you have any of these side effects, contact your physician immediately. Read your discharge instructions carefully. Medications such as blood-thinners may need to be stopped for a short time after having your colonoscopy, especially if a biopsy was performed or polyps were removed. Full recovery by the next day is normal and expected and you may return to your regular activities.

You can find more information about colonoscopy at:

- [http://www.acg.gi.org/media/colonoscopy.asp](http://www.acg.gi.org/media/colonoscopy.asp)
- [http://www.youtube.com/watch?v=rl4s1D4MGH8](http://www.youtube.com/watch?v=rl4s1D4MGH8)
- [http://www.youtube.com/watch?v=Yrw8geYQSQg](http://www.youtube.com/watch?v=Yrw8geYQSQg)
- [http://www.youtube.com/watch?v=JKfMx06hg7E](http://www.youtube.com/watch?v=JKfMx06hg7E)