Colonoscopy

Colonoscopy is a procedure in which a flexible instrument is passed through the anus to the rectum and then the entire length of the colon. Because colon and rectal cancer is the 2nd most common cause of cancer deaths in the United States, it is one of the most important tests you will ever have. EVERYONE should have a colonoscopy. The age at which you should have colonoscopy depends on risk factors (see below). If you have no risk factors, you should have your first colonoscopy at age 50, even if there are no symptoms. Colon and Rectal cancers do not typically cause abdominal pain, constipation, change in bowel habits, or other symptoms until they are advanced. So do not wait for symptoms to occur. Many or most cancers start as small polyps that can be removed at colonoscopy, thereby preventing cancer. Many early stage curable colon and rectal cancers are discovered by colonoscopy long before symptoms occur.

When done electively, the procedure usually requires a mechanical bowel prep to cleanse the colon. Most people undergoing the procedure prefer to have sedation.
Diagnostic Indications

Colonoscopy can be done to investigate symptoms, the most common of which is rectal bleeding, or to screen people without symptoms but who have a history of colorectal cancers or polyps, or have family members with colon cancers or polyps. Many people at risk for the development of colorectal cancer or polyps require lifelong surveillance with colonoscopy. The following are diagnostic indications for colonoscopy.

1) Unexplained Rectal Bleeding

Bleeding that has no obvious source may require colonoscopy for investigation. This may include bleeding with bowel movements or occult bleeding found on standard test cards administered in a physician's office. A positive stool blood test should not be repeated. That is, even if a positive test becomes negative, a colonoscopy is still necessary.

2) Surveillance and Screening

Every person should have a colonoscopy. Those who have no family history of cancer or polyps or other risk factors should have a colonoscopy every 10 years starting at age 50.

Patients with known colon cancers or polyps need colonoscopy to search for other cancers or polyps (synchronous lesions). Following treatment of the cancer or polyp, lifetime surveillance with colonoscopy is required at intervals of 1 to 5 years depending on the findings.

Those persons who have 1st degree family members (father, mother, sister, brother, child) with colorectal cancers or polyps are at increased risk of developing colorectal cancers and polyps. These people should have colonoscopy at appropriate intervals starting at age 40 or 5 years prior to the age of the youngest diagnosed family member. There are inherited cancer syndromes for which frequent colonoscopy may be indicated. These include Hereditary Nonpolyposis Colon Cancer Syndrome (3 related patients with colon cancer, at least one < 50 years of age with 2 being 1st degree relatives of the 3rd) and Familial Adenomatous Polyposis (50% chance of children inheriting disease which becomes cancer in 100% by age 55). Surveillance of patients and 1st degree relatives of patients with Hereditary Nonpolyposis Colon Cancer (HNPCC) should begin by age 20 years. Surveillance of patients and 1st degree relatives of patients with Familial Adenomatous Polyposis (FAP) should begin by early teenage years. Genetic tests are also available for these diseases. More information can be obtained at the American Society of Colon and Rectal Surgeons website (www.fascrs.org).

Patients who have had precancerous colorectal polyps removed by colonoscopy or colorectal cancers removed by surgery should have colonoscopy at appropriate intervals (1-5 years) to detect new polyps or tumors. There is some evidence that all persons should be screened for colorectal cancer with colonoscopy starting at age 50, even without a positive family history or other risk factors.

Patients with inflammatory bowel disease (Ulcerative Colitis and Crohn's Disease) are candidates for colonoscopy both to investigate symptoms and to screen for colon cancer.

Patients with a history of breast cancer, endometrial cancer, and ovarian cancer may be candidates for surveillance colonoscopy.

For a more comprehensive list of people who may be candidates for surveillance and screening, see the guidelines at the American Society of Colon and Rectal Surgeons website (www.fascrs.org).
3) Other Abnormal Tests

Patients having barium enema studies or virtual colonoscopy (CT colonography) which demonstrate polyps or potential cancers require colonoscopy to visualize, biopsy, and potentially remove the lesion. These x-rays require contrast and/or air to be placed in the rectum and advanced to the colon. An abnormality on the x-ray may require colonoscopy to confirm or refute the finding or polyps, cancers, or other diseases.

Colonoscopy examines the entire length of the colon; sigmoidoscopy examines only the lower third.
Preparation

In preparation for your colonoscopy, you will be asked to drink a large volume of liquid to cleanse the colon. This is necessary to allow your colon and rectal surgeon to visualize the colon. There are several types of preps which include GoLytely, phosphosoda, and a Miralax/Gatorade combination. If you have a history of liver cirrhosis, kidney failure, or heart failure, you may not be a candidate for the phosphosoda prep. We are increasingly using a prep that contains Miralax and Gatorade which many find more palatable. If your stools are not clear after finishing the prep, call our office to avoid having your colonoscopy cancelled. If your colon and rectal surgeon is not able to visualize your colon, the study may not be of adequate quality AND WILL HAVE TO BE REPEATED AFTER A BETTER PREP TO MAKE SURE A CANCER IS NOT MISSED. It is therefore very important that your prep cleanses your colon thoroughly and that your stools are clear when your prep is finished. Please call the office if that is not the case. It would be better to modify your prep or reschedule your procedure after a better prep rather than have to repeat your colonoscopy.

A responsible driver 18 years or older must accompany you to the hospital and stay in the waiting room during the procedure. We will not be able to perform your colonoscopy if you do not have a responsible driver present. You should arrive at the colonoscopy suite at least 1 hour prior to your scheduled time. This is important because there is preparation time checking in, getting dressed, and having an intravenous line placed for sedation.

The procedure itself may take up to 40 minutes but generally takes 15-20 minutes. Air in instilled through the scope to allow better visualization. Small instruments are passed through the scope to remove small polyps that, if not removed, could cause cancer. Biopsies or other lesions may be performed depending on findings.

Valve Prophylaxis

If you have a mechanical heart valve, make sure we know this so antibiotics can be administered prior to the procedure. If you a history of heart infections, heart disease as a child, or take antibiotics for dental or other procedures, make sure we know this and the reason why.

Anticoagulant Medications

If you take coumadin (warfarin), heparin, plavix, or other anticoagulant (blood thinner) medications, please make sure we know this and the reason you take them (heart valve, heart arrhythmia/abnormal beats, etc). You do not need to stop your aspirin unless advised to do so.

Complications

The risks and complications of colonoscopy include:

1) bleeding
2) perforation
3) missed cancers and polyps (5-10%)
4) decreased blood pressure
5) decreased breathing and possible respiratory arrest
6) cardiac arrest and death
7) allergic reactions to medications
Significant bleeding is rare and occurs between 0.05% to 3% of the time. Most bleeding episodes stop spontaneously. Rarely bleeding requires repeat colonoscopy to stop. Very rarely bleeding requires surgery to stop.

Bowel perforation occurs in 0.06-3%. When this complication occurs, either bowel rest and intravenous antibiotics or surgery will be required depending on the type of perforation. Very rarely, surgery may mean a temporary colostomy (bag).

Even in the best of hands, colonoscopy may miss a cancer 1-5% of the time. Large polyps may be missed in 12-17%. Though colonoscopy is the best screening test for colorectal cancer, it is not perfect.

In extremely rare circumstances, conscious sedation given through the iv injection site can cause heart, lung, and blood pressure complications that lead to cardiac arrest and death. Significant episodes of heart and lung problems have been reported in the literature in 0.1-0.5% of cases with death occurring in 0.03%.

After Your Colonoscopy

You will be given an instructions after the procedure which you should read carefully.

In addition to not driving:

1) You should rest at home after the procedure for at least 4 hours. You may then resume regular activity, but move at a slower pace for the next 24 hours and take frequent rest periods.

2) You should not operate machinery for 24 hours.
3) You should not drink alcohol for 24 hours.
4) You should not sign any legal documents for 24 hours.
5) You should not make important decisions for 24 hours.
6) You should not return to work or school for 24 hours.

You may:

1) drink plenty of fluids
2) begin with a light meal and progress to your normal diet. Heavy or fried foods may make you feel sick to your stomach
3) resume your normal medications unless instructed by your doctor otherwise

If You Had Polyps Removed During The Colonoscopy:

1) no alcohol for 7 days or as instructed
2) eat a soft diet for 24 hours

You should call our office (734-712-8150) if you have

1) unusual pain or discomfort
2) temperature over 101 degrees
3) excessive bleeding (coughing, vomiting, or rectal)
4) prolonged drowsiness, difficulty breathing, or confusion
5) swelling, redness, or pain at IV site
More Info

For more information on colonoscopy, go to the American Society of Colon and Rectal Surgeons and other websites.

1) www.fascrs.org
2) www.askasge.org
3) www.google.com
4) www.sages.org
5) www.cancer.org
6) www.besttreatments.co.uk/btuk/electsurgery/18630.html
7) http://digestive.niddk.nih.gov/ddiseases/pubs/colonoscopy
8) www.colonoscopy.info
9) www.preventcancer.org/colorectal/ages/colonoscopy.cfm
10) http://video.about.com/coloncancer/A-Colonoscopy--What-to-Expect.htm
11) http://www.cbsnews.com/video/watch/?id=6285039n