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Colonoscopy and Sigmoidoscopy: What to Expect

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Your doctor has suggested that you have a colonoscopy, or perhaps a shorter version called a sigmoidoscopy. For that purpose you are referred to a specialist, usually a gastroenterologist who is specially trained to do the procedure. The following describes what to expect. You must discuss the test thoroughly with your colonoscopist before the test is scheduled, and discuss any pre-existing medical conditions or treatments.

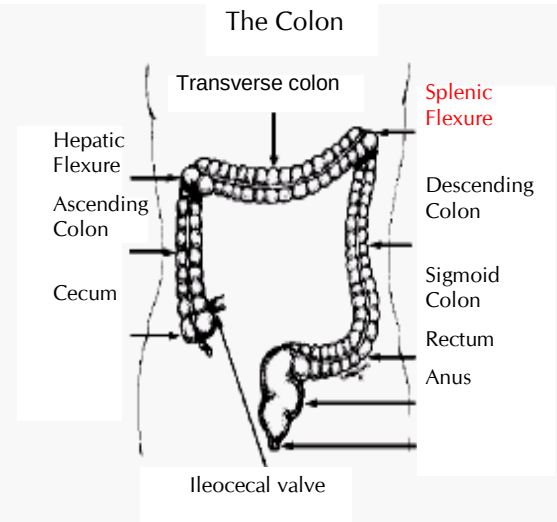
Where is the Procedure Performed?

The colonoscopy should be done in a licensed facility. The staff is specially trained for this test and, though rarely needed, the unit will be equipped with suitable emergency equipment. Such facilities require a hospital setting, or a freestanding clinic facility, usually staffed by gastroenterologists. Sigmoidoscopy may be done in a doctor's office, usually without sedation.

What Does the Procedure Involve?

Colonoscopy is an examination whereby a flexible tube-like device with a light on the end is inserted through the anus into the intestine. An image of the entire large bowel, or colon, is relayed through the instrument onto a video screen. Sigmoidoscopy is a similar test, but only the left side of the colon is seen—to near the splenic flexure. (see Figure)

Both instruments are equipped with ports or passages through which air and water can be passed into the colon, and excess fluids may be sucked back. Biopsy forceps, polyp snares, and other instruments may be passed through these ports as well.



Normally, the colonoscope is passed to the cecum, but under favorable conditions, and when indicated, it may pass further up the small intestine. The sigmoidoscope reaches no farther than the splenic flexure.

When is it Usually Performed?

Colonoscopy is commonly indicated for the diagnosis of diseases that cause acute and chronic diarrhea, intestinal bleeding, and for the detection and management of colon polyps and cancer. Acute diarrhea may be due to infections. More chronic diarrhea is often due to ulcerative colitis and Crohn's disease. These conditions may need confirmation by a biopsy. Bleeding has many causes, but colon cancer or polyps are important to rule out. Diseases of the blood vessels in the colon and diverticular disease are less common causes. Very often, the bleeding is from the anus due to a small tear (fissure) or a hemorrhoid.

The most common cause of colon pain and change in bowel habit is irritable bowel syndrome (IBS), in which no abnormalities are seen at colonoscopy. Your doctor may want the test done to rule out another cause. Other reasons for the test are unexplained weight loss, or strong family history that puts you at risk to develop a colon cancer.

Colon cancer is the second most common cancer and many groups advocate a screening sigmoidoscopy or colonoscopy in all people over the age of 50 years, when the risk of developing cancer increases. Such screening is now the most common reason the test is performed.

Preparation

For a sigmoidoscopy, it is only necessary to take a phosphate enema (Fleet) about 2 hours before the test. However, in certain centers, a full colonoscopy preparation (see below) is given in case a polyp is found making a full colonoscopy necessary. Some doctors use suppositories such as bisacodyl (Dulcolax) instead.

For a colonoscopy, it is imperative that the whole bowel be clean. You should take only fluids by mouth after noon the day before the test. The preparation must be thorough. There are several methods and your doctor must give you detailed instructions. They involve ingestion of oral laxatives, which cause a profuse diarrhea. These laxatives may be unpleasant, and sometimes cause nausea and cramps. Because of reports of kidney damage the small-volume oral phosphate enemas are less commonly used now. Nevertheless, the cleansing fluids are safe when taken with clear fluids, and necessary if the examination is to

be optimal. Elderly persons should be accompanied when undergoing these preparations.

You should inform your doctor(s) if you are diabetic, or on medication, so that diet and pill taking can be planned. Iron and certain vegetable dyes darken colon fluids and impair the view. Your doctor should advise you to stop them 72 hours before the test. If you are taking anticoagulants or aspirin, you should make your doctor/endoscopist aware when scheduling the test. If the doctor agrees, you should stop aspirin a week before. If you are to have sedation, you should arrange to have someone pick you up when you have recovered from the effects of the drugs.

Consent

As with all medical procedures, you will be asked to sign a consent form that certifies that you understand the risks and benefits of the procedure, and that your doctor has explained them to you. This is an opportunity for you to ask questions. Normally, colonoscopy and sigmoidoscopy are very safe. However, perforations of the organ or bleeding may occur, usually when the area being examined is diseased, or if a large polyp is being removed. Therefore, drugs that interfere with clotting such as aspirin or anticoagulants should be stopped, and normal clotting achieved before the test. Overall, complications are rare but they may require emergency surgery.

Sedation

For a sigmoidoscopy, sedation is seldom given. The procedure is uncomfortable, even painful, but is usually brief. On the other hand, colonoscopy requires sedation. There are many local variations in how, when, and which sedation is employed. The drugs are administered in the examination room immediately before the test. For the most part, the medications are safe and effective, but require a period of recovery after their administration. You are not put to sleep since you need to be conscious and cooperative throughout (conscious sedation).

Sedation lessens the inevitable anxiety associated with the test and, when given with a painkiller, it reduces the pain. You may even forget having had the test. You may not remember or fully understand the test results given afterwards, so a follow-up office visit is advisable. The colonoscopy nurse or doctor will explain to you those adverse reactions particular to the drug or drugs used. You must tell them of previous unfavorable reactions to medication.

Tolerances differ and too much sedation risks arrested breathing. A device clipped to your finger permits the nurse to monitor your heart rate and blood oxygen saturation during the test.

The Test

Normally, you will be asked to lie comfortably on your left side on an examining table. If you wish, you should be able to watch the examination on a video screen. Sometimes, the doctor can explain any abnormalities he or she may encounter.

The examiner, standing behind you, will first examine and lubricate your anal canal with a gloved finger. The colonoscope is passed through the anus into the rectum. Although there are intricate controls that help direct the tip of the instrument, advancement depends upon the operator pushing it. Since the colon has many sharp angles, the colonoscope tip frequently abuts on a curve. Sometimes the colon is stretched during the procedure, which may cause pain. The doctor and nurse have a repertoire of maneuvers to help advance the instrument. These include alternately withdrawing and advancing, pressing on the abdomen to lessen the tendency of the tube to bulge, and instructing you to assume many different positions. The colon is usually collapsed, so the examiner will pump air through the colonoscope to inflate it. This may produce a feeling of fullness or discomfort. A steady stream of water passed through the instrument sometimes helps open up the colon making it easier to pass the colonoscope.

For some people, the test goes rapidly and painlessly. For others, it is more difficult and sometimes uncomfortable. It is possible to pause and give you a rest, or to give more painkiller through the intravenous line. On the other hand, most of the procedures done through the colonoscope are painless. The lining of the bowel has no pain receptors, so biopsy and even removal of a polyp are painless.

You need to be patient while the doctor carefully examines the colon and eventually advances the colonoscope to the cecum, and sometimes into the small bowel. The nurse will coach you on how to breathe. Regular breathing relaxes you, minimizes the pain, and maintains good oxygen saturation. Overbreathing may cause you to feel dizzy.

Afterwards

If you are not sedated, the doctor can discuss the results of the test and the next steps in your care promptly. Then you are free to leave. If you have been sedated, you will be asked to lie down in a bed in the recovery area where the nurse will monitor you until you are fully alert. You should not drive or consume alcohol for 24 hours after sedation. If sedated, or if the laboratory results of a biopsy are awaited, it may be necessary to phone your doctor or schedule a visit for a full explanation of the test results.

It is important to promptly report any new severe abdominal pain or rectal bleeding to your doctor, or go to the hospital's emergency room. If for any reason, the test is unsuccessful in that the instrument fails to reach the cecum, or the colon is insufficiently clean, the procedure may be rescheduled, or a barium enema performed. This is an x-ray of the colon after it has been filled with a radiopaque material called barium.
