

Colonoscopy and Flexible Sigmoidoscopy



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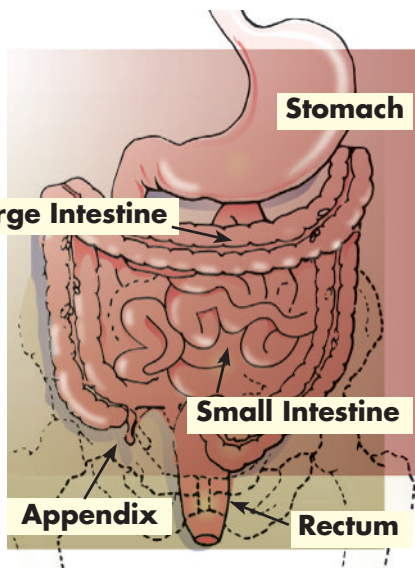
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Colonoscopy and Flexible Sigmoidoscopy (Lower GI Endoscopy)

Over the last 10 to 15 years, *endoscopy* has emerged as one of the best diagnostic tools available to gastrointestinal (GI) physicians.

Endoscopes give the physician the advantage of being able to directly see the inside of the gastrointestinal tract. Previously, using other diagnostic tests, GI

physicians had to make highly educated guesses about the nature of the problem inside the GI tract, unless surgery was done.



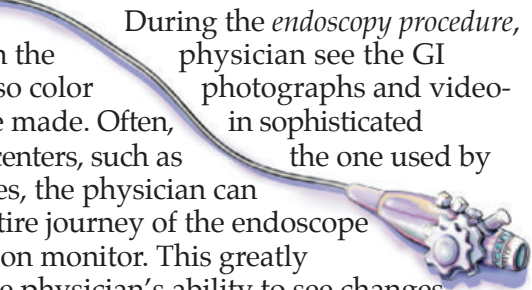
Endoscopy is one of the best diagnostic tools available.

Although other diagnostic tests have been valuable, and still play an important role in some cases, endoscopy is an awesome tool, enabling your physician to see into the esophagus, stomach, duodenum, colon and rectum. Endoscopy even allows the physician to perform biopsies or therapeutic procedures and even take color photographs of the inside of your GI tract!

What is an endoscope?

The *endoscope* (as shown in the illustration) consists of a hollow flexible tube that contains thousands of fiberglass fibers called *fiberoptics*. That bundle of fiberoptics allows light to be transmitted to the tip of the endoscope, literally “lighting up” the inside of the GI tract. The fiberoptics, with a lens system, also allow images to be transmitted back to the other end of the endoscope, so the doctor can see the inside of your GI tract!

During the *endoscopy procedure*, not only can the physician see the GI tract, but also color photographs and videotapes can be made. Often, in sophisticated endoscopy centers, such as the one used by GI Associates, the physician can view the entire journey of the endoscope on a television monitor. This greatly enhances the physician’s ability to see changes in the GI tract.



Endoscopy is a safe, effective diagnostic tool that is more accurate than X-ray examination. In addition to being able to *inspect the GI tract*, endoscopy helps the physician *find sources of bleeding, identify lesions* (such as ulcers or tumors) that might be present, and also allows the physician to actually *treat* some conditions and diseases during the procedure.

A small open channel within the endoscope tube allows the physician to use accessory instruments that can *cauterize bleeding areas, remove small polyps, or inject solutions*. Other tiny instruments can *collect biopsy specimens*.

Before this amazing technological development that has revolutionized gastrointestinal diagnosis and treatment, the only way to see the inside of the GI tract was surgery. X-rays have always been and still are an important tool, used to outline a particular GI area.

Since endoscopy is usually done as an outpatient procedure, a tremendous amount of money is often saved by avoiding hospitalization. Surgery is also avoided many times, through the use of endoscopy. A major plus of endoscopy is that it literally saves lives, through early diagnosis and treatment of various GI diseases and disorders *before* they become life-threatening.

In addition, endoscopy is often much easier on the patient than some other alternatives, such as surgery.

Endoscopy saves lives!

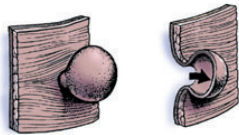
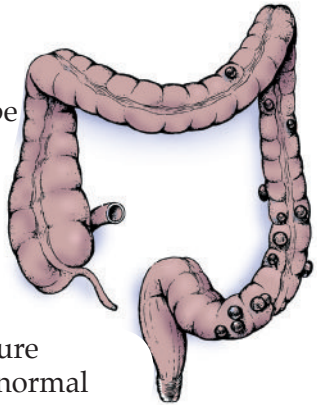
Lower GI Endoscopy

Lower GI endoscopy, also known as *colonoscopy* (examination of the rectum and entire colon) or *sigmoidoscopy* (examination of the rectum and sigmoid colon), allows the physician to directly inspect the lower GI tract, including the rectum and colon.

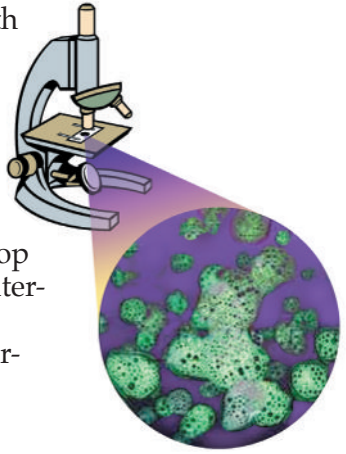
Why is it needed?

Lower GI endoscopy may be used to diagnose or treat diverticulosis or diverticulitis, colitis (inflammation of the colon), polyps or colon cancer. It may also be used as a follow-up procedure to further investigate an abnormal or suspicious colon X-ray (barium enema).

Symptoms such as bleeding, long-lasting diarrhea, pain, gas or other GI discomfort may also be evaluated through the use of lower GI endoscopy.



Biopsies may be taken with the endoscope and it may be used to remove foreign objects (accidentally swallowed) from the lower GI tract (especially in children). In some cases, it may be used to stop or control bleeding by cauterizing an area or may be used to dilate (enlarge) narrowed areas.



Preparing for Lower GI Endoscopy

To help the doctor clearly see the lower GI tract, the area must be very clean.

To clean the lower GI area, a *liquid diet* must be followed for a limited period of time, which is followed by the use of *laxatives* and/or *enemas*.

To clearly see the lower GI tract, it must be very clean.

Patients prepare by drinking a solution (such as *Golytely* or *Colyte*) the night before the procedure. The solution is designed to pass through the GI tract, causing a mild diarrhea that helps flush the bowel free of waste material (*feces*) that might block the physician's view.

The quality of the examination depends on how well the patient is prepared.



Without a thorough cleansing, the procedure might have to be repeated! So, your understanding and cooperation is very important.

A lower GI endoscopic exam lasts between 15 minutes and 1 hour, depending on what procedures will be performed, such as biopsy, removal of polyps (*polypectomy*), or others.

The staff of GI Associates will tell you when your exam is scheduled and when to start preparing for the exam. Please follow their directions exactly.

Because you will be given a sedative to relax you during the procedure, another adult must be with you, so you will not have to drive after the procedure.

Remember to tell the doctor:

- If you are allergic to any medications or anesthetics
- If you are pregnant
- If you have any major health problems, such as heart or lung problems
- Also, bring any previous X-rays of the lower GI tract with you. It may be important that the physician see them before your procedure.

Where will the procedure be done?

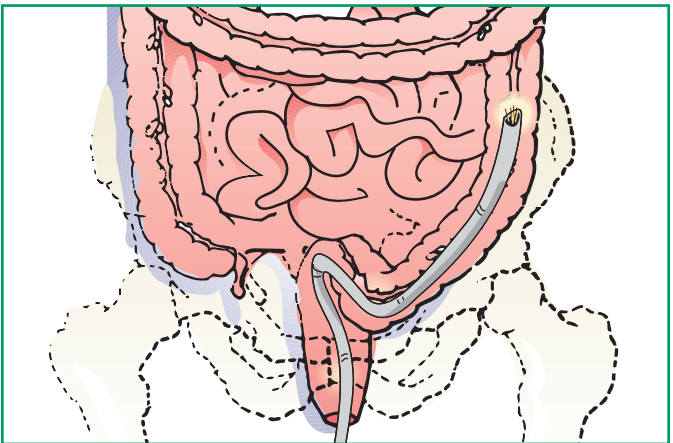
Most lower GI endoscopies are done on an outpatient basis. Usually, the physicians of GI Associates perform the procedure in our *Endoscopy Centers*, located in Jackson, Madison, and Vicksburg. Patients that are hospitalized may be transported from their hospital room to another area of the hospital especially equipped for endoscopy.

What happens during the procedure?

It is normal to be anxious before the procedure. The following description will help you understand what to expect. It is our belief that an informed and cooperative patient is the most important part of a successful procedure!



You will be given a gown to wear and placed in a comfortable position to facilitate the exam usually on your left side with knees bent and close to your chest. Your blood pressure and pulse will be checked frequently throughout the procedure. Intravenous fluids (an I.V.) will be started, through which you will receive a sedative to relax you. Some people actually sleep through the entire procedure!



The endoscope is gently inserted and slowly advanced into the colon by the doctor, who continually inspects the walls of the colon and rectum.

The endoscope is slowly withdrawn when the exam has been completed. Sometimes mild discomfort is felt, but pain is rare.

After the procedure

Afterwards, you will rest until the effects of the sedative have worn off. You may experience some temporary bloating and may expel some air from your rectum as a result of air that was introduced during the procedure.

Your physician or nurse will instruct you about what diet to follow after the procedure.

Some patients notice soreness or a tender bump at the site of the I.V. That irritation can be caused by the medication that was used. It will slowly disappear, but may take weeks and rarely, months.

Are there any complications of lower GI endoscopy?

The following complications may occur, but are rare:

- *Bleeding* may occur at the site of a biopsy that was done during the examination. Usually, it is a very small amount, but in rare cases, might possibly require a transfusion or surgery.
- A *tear or perforation* of the colon or rectal wall may occur, but this is also very uncommon. The tear may seal itself, or may possibly require hospitalization and emergency surgery for repair of the tear.
- Other general risks include *unexpected drug reactions* or *severe complications related to another disease*, such as pre-existing heart or lung disease. *Death* is a remote possibility, as it is during any medical procedure. Death as a complication of endoscopy is extremely rare.

Getting the results of your examination

Often, the GI physician will tell you the results of your examination as soon as the sedation wears off. Results from some tests that may have to be done during the procedure will require a wait of several days. Your physician will tell you when those results can be expected.

In Summary...

Lower GI endoscopy is an extremely valuable tool for the diagnosis and treatment of many GI conditions. It is very safe and usually causes minimal discomfort to the patient.

Your GI physician has recommended this procedure for you because it will contribute to either the diagnosis or treatment of your particular problem. Serious complications from this procedure are very rare.

Please ask us about any additional questions that you may have about the procedure. Working as partners in your care, we can obtain the best possible examination.



