

Flexible Sigmoidoscopy

Sigmoidoscopy is the visual examination of the inside of the rectum and sigmoid colon, using a lighted, flexible tube connected to an eyepiece or video screen for viewing. This device is called an endoscope. The colon (large intestine) is 5 to 6 feet long. During a sigmoidoscopy, only the last 1 to 2 feet of the colon is examined. This last part of the colon, just above the rectum, is called the sigmoid colon.

Equipment

The flexible endoscope is a remarkable piece of equipment that can be directed and moved around the bends in the lower colon and rectum. The image in the bowel is transmitted through the endoscope either to the eyepiece or a video screen. An open channel in the scope allows other instruments to be passed through it to take tissue samples (biopsies) or to remove polyps.

Reasons for the Exam

Sigmoidoscopy is performed to diagnose the cause of certain symptoms. It is also used as a preventative measure to detect problems at an early stage, even before the patient recognizes symptoms. The following are some reasons for performing a sigmoidoscopy.

Bleeding -- Rectal bleeding is very common. It often is caused by hemorrhoids or by a small tear at the anus, called a fissure. However, more serious problems can cause bleeding. Benign polyps can bleed. It is important to identify and remove polyps at an early stage before they can become cancerous. Rectal and colon cancers bleed and require immediate diagnosis and treatment. Finally, various forms of colitis and inflammation can cause bleeding.

Diarrhea -- Persistent diarrhea should always be evaluated. There are many causes of diarrhea and the exam is of great help in tracking down the specific cause.

Pain -- Hemorrhoids and fissures are some causes of pain around the anus or in the rectum. Discomfort in the lower abdomen can be caused by tumors. Diverticulosis can occur in the lower bowel. With this condition, small pockets or sacks project from the bowel.

X-ray Findings -- A barium enema x-ray exam may show abnormalities that need to be confirmed or treated by sigmoidoscopy.

Detection -- Colon cancer is one of the most common cancers in the country. It is highly curable if it is found early. This cancer usually begins in the colon as a polyp that remains benign for many years. Therefore, it is generally advisable to have a sigmoidoscopy after age 40 or 50. If parents, brothers, or sisters have had colon polyps or colon cancer, it is even more critical to have this exam. The tendency to develop colon cancer and polyps can be inherited.

Preparation for the Test

To obtain the full benefit of the exam and allow a thorough inspection, the rectum and

sigmoid colon must be clean. Preparation usually involves drinking clear liquids the day before along with taking enemas and/or laxatives. Specific instructions for preparation are provided beforehand.

The Procedure

Flexible sigmoidoscopy is usually performed on an outpatient basis. It is performed with the patient lying on the left side with the legs drawn up. A sheet is placed over the lower body. A finger or digital exam of the anus and rectum is performed. Then the endoscope is gently inserted into the rectum. Air is inflated into the bowel to expand it and allow for careful examination. The patient usually feels a slight discomfort similar to strong gas cramps. The endoscope is then advanced under direct vision and moved around the various bends in the lower bowel.

It is advanced as far as possible without causing undue discomfort. When possible, the exam is continued to 25 inches (60 cm). Certain conditions, such as diverticulosis, irritable bowel syndrome, or prior pelvic surgery may produce discomfort when the sigmoid colon is entered by the endoscope. The exam is stopped if this occurs. The exam usually takes 5 to 15 minutes. Sedation is not normally required.

Benefits

The benefits of sigmoidoscopy can include the following:

- It is often possible to determine the specific cause of symptoms.
- Conditions such as colitis and diverticulosis can be monitored to determine effectiveness of treatment.
- Polyps and tumors can be discovered at an early stage.

Alternative Testing

Alternative testing includes barium enema x-ray exams. Additionally, the stools can be examined in a variety of ways to uncover or study certain bowel conditions. However, a direct look at the lower rectum and lower bowel by sigmoidoscopy is by far the best method of examining this area.

Side Effects and Risks

Bloating and bowel distension are common due to the air inflated into the bowel. This usually lasts only 30 to 60 minutes. If biopsies are done or if a polyp is removed, there may be some spotting of blood. However, this is rarely serious. Other uncommon risks include a diagnostic error or oversight, or a tear (perforation) of the wall of the colon which might require surgery.

Summary

Sigmoidoscopy is a simple outpatient exam which can uncover a serious medical problem. Specific diagnoses can be made. Treatment programs can be evaluated, or reassurance can be provided when the exam is normal. It is one of the most useful and simple exams in medicine