Benefits

A colonoscopy is performed to identify and/or correct suspected problems of the colon. The test enables a diagnosis to be made and specific treatment(s) suggested. Polyps or other lesions found during the exam may be removed or destroyed at that time, eliminating the need for a major operation later. If a bleeding site is identified, treatment can be administered to stop the bleeding. Other treatments can be administered through the endoscope, when necessary.

Alternatives to Colonoscopy and Complimentary Testing

Alternative tests to colonoscopy include a barium enema or an air contrast barium enema. Newer types of x-ray exams, such as magnetic resonance imaging are being evaluated but are still considered unproven. The study of the stool and blood can provide indirect information about a colonic condition. These exams, however, are purely diagnostic, do not allow direct viewing of the colon, removal of polyps or biopsies, and must be frequently confirmed or followed by a colonoscopy.

Side Effects and Potential Risks

Bloating and distension typically occur for about an hour after the exam, until the air is expelled. Serious risks with colonoscopy, however, are very uncommon. One such risk is excessive bleeding, especially with the removal of a large polyp, which is usually self-limited or controllable via endoscopic treatment. In rare instances, a tear in the lining of the colon or perforation may occur. These complications may require hospitalization and, rarely, surgery. Due to the many folds in the colon, very small lesions could remain hidden during the exam and may go unnoticed.

Due to the use of mild sedation, the patient should not drive, operate machinery, or make important decisions following the exam. For this reason, someone should be available to drive the patient home.

Summary

Colonoscopy is an outpatient exam that is performed with the patient lightly sedated. It is considered the gold standard in the diagnosis and treatment of colonic disorders. The procedure provides significant information used to diagnose and determine which treatment is the best for a specific colonic condition. In certain cases, therapy can be administered directly through the endoscope. Serious complications rarely occur from colonoscopy. Depending on the results of the colonoscopy, the physician is then better able to answer any questions for the patient and develop the best treatment plan for the underlying condition.

SPECIAL INSTRUCTIONS:

This material does not cover all information and is not intended as a substitute for professional medical care.
Colonoscopy

Colonoscopy is the visual examination of the large intestine or colon using a lighted, flexible fiberoptic or video endoscope. The colon is an organ that extends from the right lower portion of the abdomen, courses up under the ribs on the right side, travels across the abdomen to under the left ribs, and finally runs down the left side, ending at the anus. It is 5 to 8 feet long and shaped like a question mark. The colon has a number of functions, the most important of which include withdrawing water from the liquid stool, and the storage of stool until it is emptied from the body.

Equipment

The colonoscope is a remarkable piece of equipment that can be directed and moved around the many bends in the colon. These flexible endoscopic tools come in two types. The original purely fiberoptic instrument has a flexible bundle of glass fibers that collects the lighted image at one end and transfers the image to the eye piece. The newer, now standard, video endoscopes use a tiny, optically sensitive computer chip camera at the end. Electronic signals are then transmitted through the endoscope to a computer processor, which displays the image on a video monitor. Inside of the endoscope is an open channel or conduit, which allows the doctor to pass other instruments through the colonoscope in order to perform biopsies, remove polyps, shoot lasers or inject solutions.

Why Perform Colonoscopy?

There are many different diseases that may affect the colon. The medical history, physical exam, laboratory tests and x-rays can provide information useful in making a diagnosis. However, directly viewing the inside of the colon by colonoscopy is considered the best method or gold standard for discovering and treating these problems. More specifically, colonoscopy is used for:

- Colon cancer - a serious but highly curable malignancy
- Polyps - fleshy tumors which usually are the forerunners of colon cancer
- Colitis (Ulcerative or Crohn's) - chronic, recurrent inflammation of the wall of the colon
- Diverticulosis and Diverticulitis - pockets along the intestinal wall that develop over time that may become infected
- Bleeding lesions - bleeding may occur from different points in the colon
- Abdominal symptoms, such as pain or discomfort, particularly if associated with weight loss or anemia
- Abnormal barium x-ray exam
- Chronic diarrhea, constipation or a change in the bowel habits
- Anemia

Pre-Procedure Preparation

In order to be able to see the inside of the colon, it must be clean and free of stool. The physician provides instructions as to the preferred method of cleaning. Usually this involves drinking a laxative solution, which flushes the colon clean or taking laxatives and enemas. Normally, the patient drinks only clear liquids and eats no food for the day before the exam. The patient may normally continue the use of regular medications during this time, at the physician's instruction. Depending on the anticipated procedure, patients with a history of previous heart valve damage or replacement, or infection of the heart valves may be required to take antibiotics just prior to the endoscopy.

The Procedure

Colonoscopy is usually performed on an outpatient basis. A mild form of sedation is administered to eliminate pain and induce "twilight sleep." The endoscope is then inserted through the anus and moved gently around the colon and into the small bowel. If a polyp is encountered, it is removed via a thin wire lasso or snare. Electrocautery (electric heat) is applied to painlessly remove lesions and to stop any bleeding. Other tests can be performed during colonoscopy, including biopsy to obtain a small tissue specimen for microscopic analysis.

The procedure normally takes 15-30 minutes and is seldom remembered by the sedated patient. A recovery area is available to monitor vital signs until the patient is fully awake. It is normal to experience mild cramping or abdominal pressure following the exam. This usually subsides in 1-5 hours.

Results

After the exam, the physician explains the immediate findings to the patient and family. If a biopsy has been taken or a new treatment recommended, normally, an appointment is scheduled for a later date. Biopsy results are usually not available for 5-7 days after the procedure. New treatments require 2 weeks to be fully effective. Frequently, educational materials are provided by the physician, concerning the conditions found during the endoscopy. Additional tests may be ordered depending upon the results of the procedure.