What is colonoscopy?

Colonoscopy is a procedure used to examine the lining of the rectum and the colon. Colonoscopy can detect inflamed tissue, ulcers, and abnormal growths. The procedure is most commonly used to identify pre-cancerous growths, and remove them before they turn into a cancer. Additionally, colonoscopy can help us diagnose unexplained changes in bowel habits, causes for abdominal pain, bleeding from the anus, weight loss and other symptoms.

What are the colon and rectum?

The colon and rectum are the two parts of the large intestine. The terms colon and large intestines are often used interchangeably. Digestive waste enters the colon from the small intestine as a semisolid. As waste moves toward the anus, the colon removes moisture and firms the stool. The rectum is about 6 inches long and connects the colon to the anus and acts as a reservoir to hold stools in between bowel movements. Stool leaves the body through the anus. Muscles and nerves in the rectum and anus control bowel movements.

How to Prepare for the Colonoscopy?

On the day <u>preceding</u> the colonoscopy, you are to start a <u>Clear Liquid Diet</u>, and for the rest of that day you are to follow the instructions as detailed under the tab <u>Preparation for Colonoscopy</u>.

The cleansing repeats on the morning of the examination, 4 hours before the procedure. Please be aware that the sensitivity of the procedure is diminished significantly if the colon is not adequately cleansed.

You should inform us of all medical conditions and any medications, vitamins, or supplements taken regularly, including

- Aspirin
- Arthritis medications
- Blood thinners
- Diabetes medications
- Vitamins that contain iron

Driving is not permitted for 12 hours after colonoscopy to allow the sedative time to wear off. Before the appointment, you should make plans for a ride home. The law prohibits us from allowing you to go home by Taxi after the procedure.

How is the colonoscopy performed?

During the colonoscopy, you will lie on your left side on an examination table. A light sedative and pain medication will be administered to help keep you relaxed.

Deeper sedation may be required in some cases. We will monitor your blood pressure, EKG, the concentration of oxygen in your blood and your heart rate, and administer more sedatives and pain medications, if necessary, to keep you comfortable.

The doctor will insert a long, flexible, lighted tube called a colonoscope, or scope, into the anus and slowly guide it through the colon under direct vision. The scope inflates the large intestine with room air to give the doctor a better view. A small camera mounted on the tip of the scope transmits a video image from inside the large intestine to a TV screen, allowing the doctor to carefully examine the intestinal lining.

Once the scope has reached the opening to the small intestine, and the opening of the appendix, it is slowly withdrawn and the lining of the large intestine carefully examined.

Removal of Polyps and Biopsy

We can remove growths, called polyps, during colonoscopy and have them checked by a pathologist for signs of cancer. Polyps often look like a wart that is attached to the wall of the colon. Polyps are common in adults and are usually harmless. However, most colorectal cancer begins as a polyp, so removing polyps early is an effective way to prevent cancer.

During the procedure, in addition to removing polyps, we can also take samples from abnormal-looking tissues. The procedure, called a biopsy, allows a pathologist to examine the tissue with a microscope for signs of disease.

We remove polyps and biopsy tissue using tiny tools passed through the scope. It is very rare for bleeding to occur, but if it does, the doctor can stop the bleeding it with an electrical probe that cauterizes the bleeding spot, or by injecting special medications at the site of the bleeding. Tissue removal and the treatments to stop bleeding are painless.

Risks:

There are some risks associated with the colonoscopy, but the general belief in the scientific world is that the benefits far outweigh the risks. The most common risks include:

Bleeding: Can happen around 1 in 400 cases, almost exclusively after polyp removal and much less likely after biopsy. This may require the transfusion of blood, repeating the colonoscopy to stop the bleeding, hospitalization or surgery.

Perforation: Puncture of the colon wall can happen in 1 in 500 cases, most likely in association with the removal of polyps. This may require hospitalization and surgery to repair the site of puncture.

Reaction to medications: You will receive Fentanyl and Versed unless you are allergic to those drugs. These drugs could cause an allergic reaction, redness at the site of administration of the drug and even suppress breathing or cause irregularity in your heart beat. These medications will make the procedure more comfortable. Should you wish it, you could ask for the services of an anesthesiologist, to give you stronger medications that will make the procedure pain-free.

Breathing problems and heart problems: There are rare reports of strokes and heart attacks occurring during the colonoscopy, in patients who are at risk for those medical conditions. Although death has been reported during colonoscopy, the incidence of this happening is extremely rare.

Alternatives

Colonoscopy is viewed as the gold standard for the early diagnosis of colon cancer. It remains the <u>only</u> tool that can both identify <u>and</u> remove polyps, as well as sample abnormal-appearing tissue.

Other tests that can be used for early detection of colon cancer include:

Stool test for the presence of blood

Stool genetic testing

Barium enema

CT scan based evaluation called CT Colography.

As mentioned above, these tests are less sensitive than colonoscopy in detecting early cancer or pre-cancerous areas, will require a similar cleansing procedure as the colonoscopy (Barium enema and CT Colography), and abnormal tissues, if identified cannot be taken out at that time. In those instances the preparation would have to be repeated at a later date and a colonoscopy performed to remove the abnormal tissue.

Recovery

Colonoscopy usually takes 15 to 20 minutes. Light cramping or bloating may be felt during the first hour after the procedure, and is typically relieved with the passage of gas. The sedative takes time to completely wear off. Patients will need to remain in the Endoscopy Center for about 30 minutes after the

procedure. You cannot drive or exercise for 12 hours. Full recovery is expected by the next day. Discharge instructions should be carefully read and followed. In the majority of cases you can resume eating regular food after the procedure, but we advise you to proceed slowly, allowing for gas to exit the colon.

If you develop any of these rare side effects, please contact us immediately at (408) 402-9990:

- Severe abdominal pain
- Fever
- Bloody bowel movements
- Dizziness
- Weakness

Points to Remember

- Colonoscopy is a procedure used to examine the inner lining of the colon and rectum.
- All solids must be emptied from the gastrointestinal tract by following a Clear Liquid Diet for 1 day before the colonoscopy, and the Preparation for Colonoscopy instructions.
- The sensitivity of the colonoscopy is diminished significantly if the colon is not adequately cleansed.
- During colonoscopy, a sedative, and pain medication will be administered directly into your vein to help keep you relaxed.
- A doctor can remove polyps and biopsy abnormal-looking tissues during colonoscopy.
- Driving is not permitted for 12 hours after colonoscopy to allow the sedative time to wear off.