Information on Colonoscopy

Description of the Procedure:

Colonoscopy is an examination of the entire lower digestive tract (large intestine) performed with a flexible video instrument called a colonoscope. The procedure involves insertion of the colonoscope into the rectum and advancement of the scope throughout the colon while the doctor observes images displayed on a video monitor. Colonoscopy is commonly recommended as a screening test for colorectal cancer.

Your doctor can pass instruments through the colonoscope to treat a variety of conditions including removal of polyps, stretching open a narrowed area, or performing procedures to stop or prevent bleeding. If any abnormalities are seen, several small tissue samples (biopsies) may be obtained to be examined under a microscope by a pathologist or submitted for other laboratory tests.

Most patients choose to receive intravenous medications for sedation and sleep through the procedure, which typically takes anywhere from 15 to 60 minutes.

Risks: The following risks have been associated with colonoscopy:

1. **Slowing of breathing, low blood pressure, and abnormal heart rate/rhythms.** Intravenous medications may cause a slowing of breathing and in rare cases may cause breathing to stop. The medications as well as distension of bowel may also cause lowering of blood pressure and/or abnormal heart rhythms. You will be carefully monitored and treated for any changes in breathing, blood pressure and heart rhythms that may occur.

2. **Aspiration pneumonia.** Sedation during colonoscopy may lead vomiting which can result in aspiration of fluid into the lungs and rarely pneumonia.

3. **Perforation of the colon.** A perforation or tear in the wall of the colon generally occurs in less than one per 1,000 colonoscopies. However, if a large polyp is removed during the procedure, the risk of a perforation may be increased. Small perforations can often be closed with clips during the procedure, but larger perforations may require antibiotics, surgery, and rarely a colostomy.

4. **Bleeding.** Bleeding may follow a biopsy or removal of a growth and may occur immediately or up to 2 weeks after the procedure. If a large polyp is removed during the procedure, the risk of bleeding could be as high as 1 in 10; however, this is rarely life threatening. Excessive bleeding may require a blood transfusion, repeat colonoscopy, and/or surgery.
5. **Infection.** Endoscopy may cause bacteria to temporarily enter the bloodstream; however, the risk of adverse consequences from this is very low. Based on the latest recommendations of the American Heart Association, patients with heart murmurs or artificial heart valves are no longer given antibiotics before endoscopy.

6. **Injury to the spleen.** Injury to the spleen has rarely been reported.

7. **Other complications.** Patients may rarely experience an unexpected adverse drug reaction. Other possible complications of a colonoscopy include inflammation and bruising or infection at the intravenous site, mild abdominal discomfort, bloating, and injury to internal organs. Medications administered for sedation may cause a brief period of memory loss. Unanticipated complications may occur.

8. **Death.** Death as a direct complication of colonoscopy is extremely rare, occurring in less than one per 10,000 procedures.

9. **Missed lesions.** While colonoscopy is the best available test for the examination of the colon, it is not perfect, and occasionally it may miss a significant growth. This can occur particularly if the colon is not completely clean, if there are blind areas in the colon, or if the exam cannot be completed. Inability to complete the exam occurs in fewer than 5 per 100 colonoscopies.

**Benefits:**

The purpose of a colonoscopy is to gain information about the entire large intestine that may not be obtained by X-ray or by other diagnostic means and to treat certain conditions. The procedure is generally very safe and is well tolerated by most patients.

**Alternative Options:**

Radiology studies such as barium enema, CT scans (virtual colonoscopy), MRI scans, and surgery are the possible alternatives to colonoscopy, though these tests may not provide the same types of information as colonoscopy. Abnormalities found during radiology studies often require colonoscopy for removal of polyps or to perform biopsies.