Information on Upper Endoscopy and Enteroscopy

Description of the Procedure:

Upper gastrointestinal endoscopy (or EGD) is an examination of the upper part of the digestive tract that includes the esophagus, stomach, and the first portion of the small intestine, called the duodenum. The procedure involves the insertion of a flexible video instrument called an endoscope into the mouth and into the upper digestive tract while the doctor views images on a video monitor. If abnormalities are suspected in the small intestine, then a longer scope called an enteroscope is occasionally used to achieve a more extensive examination.

Your doctor can pass instruments through the endoscope to treat a variety of abnormalities 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.

Topical anesthetics will be applied to the back of your throat to minimize any discomfort from insertion of the endoscope. Most patients choose to receive intravenous medications and sleep through the procedure, which typically takes 10 to 45 minutes.

Risks:

The following risks have been associated with upper gastrointestinal endoscopy:

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 or sometimes distension of the bowel may 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. Perforation of the digestive tract. A perforation or tear in the digestive tract occurs in about 1 to 4 per 10,000 procedures. The risk of perforation is up to 10 times higher than this when procedures are performed to stretch open a narrowed portion of the digestive tract (dilation). Perforation is more likely to occur in the presence of a tumor or other structural abnormalities of the digestive tract. Perforations that cannot be closed during the endoscopy procedure may need to be treated with antibiotics and surgery.

3. Bleeding. Significant bleeding from the gastrointestinal tract may very rarely occur following endoscopy, particularly in people with bleeding disorders or after therapeutic procedures such as removing large polyps. Excessive bleeding may require a blood transfusion or surgery.
4. 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.

5. Aspiration of stomach contents. Aspiration of stomach contents into the lungs occurs rarely in patients undergoing this procedure.

6. Adverse effects treating enlarged veins (varices). An injection of blood clotting agents (sclerosants) or placement of rubber bands onto enlarged veins may cause fever, ulcers, serious infection, as well as scarring and narrowing of the esophagus, which may require treatment.

7. Other complications. Patients may rarely experience an unexpected adverse reaction to medications. Inflammation, bruising or infection at the intravenous site, a sore throat, mild abdominal discomfort, and dental injury are other possible complications of an upper gastrointestinal endoscopy. Medications administered for sedation may cause a brief period of memory loss. Unanticipated complications may occur.

8. Death. Death has been reported to follow upper gastrointestinal endoscopy in 7 per 100,000 procedures, most often in patients who are seriously ill prior to the procedure.

Benefits:

Upper gastrointestinal endoscopy may identify a cause for symptoms that may not be obtained by X-ray or other diagnostic means. The procedure is generally very safe and is well tolerated by most patients. Treatments performed through the endoscope often carry less risk than surgery.

Alternative options:

X-rays, MRI scans and surgery are the usual alternatives to upper gastrointestinal endoscopy, although these may not provide the same kinds of information that can be obtained with endoscopy.

Deep Enteroscopy:

Deep enteroscopy is somewhat more invasive than regular endoscopy, takes longer to perform, and carries higher risks, especially the risk of perforation. Overall, the incidence of major complications is about 7 per 1000 cases. Pancreatitis has been reported in about 1 in 200 enteroscopy procedures.