UPPER GASTROINTESTINAL TRACT ENDOSCOPY - GASTROSCOPY

WHAT IS AN UPPER ENDOSCOPY (GASTROSCOPY)

Upper endoscopy or gastroscopy is a procedure that is commonly done that allows the physician to directly visualize and examine the lining of the upper gastrointestinal tract that includes the esophagus (food pipe), stomach, and duodenum (first portion of the small bowel).

REASON FOR THE EXAM

Gastroscopy is performed to evaluate such problems as:
* Significant heartburn
* Chest or abdominal pain
* Difficulty swallowing
* Nausea and vomiting of food
* Vomiting of blood or passing black stools from the rectum
* Iron deficiency anemia
* Evaluate an x-ray abnormality

Gastroscopy can treat problems in this area:
* Stretch a narrowing in the food pipe or stomach
* Remove small growths (polyps)
* Remove a foreign body that is stuck
* Control bleeding

BENEFITS

* Gastroscopy is more accurate than x-rays and blood tests in detecting problems of the upper gastrointestinal tract. Occasionally an abnormality may be missed because of its location or be hidden by overlying fluid or food.
* Biopsies or tissue samples can be obtained through the scope. Biopsies cannot be obtained by an x-ray.
* Therapeutic procedures can be performed. These therapies cannot be performed by x-ray.

ALTERNATIVES

Although not as accurate as gastroscopy, a barium x-ray, where one swallows barium and a series of pictures are taken, can be performed and is a reasonable alternative for patients who do not want to proceed with gastroscopy. However gastroscopy is the preferred mode to evaluate an upper gastrointestinal tract problem.
PREPARATION

* In order to prevent a complication of fluid or food entering the lungs, it is important that one should have nothing to eat or drink from midnight before the test.

* Your doctor should be aware of all the medications you are on, especially blood thinners such as COUMADIN and DIABETIC MEDICATIONS, allergies you have and any significant medical problem. If you are on blood thinners such as Coumadin this will need to be stopped before the procedure. Some patients may require low molecular weight heparin prior to the test if they are at a greater risk for clot formation. If you take diabetic medications this may also need to be altered prior to the scope. Otherwise one should take all the medications one normally does even on the day of the test with a small amount of water.

* Unlike dental procedures ANTIBIOTICS are NOT necessary prior to a gastroscopy

* There is NO need to stop ASPIRIN or ANTIINFLAMMATORY DRUGS (NSAID’S) such as Advil, Motrin etc. prior to a gastroscopy

* One should not drive for 24 hours after the test because of the sedating effect of the medication. One should arrange for a ride home after the test.

PROCEDURE

A gastroscopy is a test where a camera is used to investigate the esophagus, stomach and duodenum. Gastroscopy, as a rule, is performed at the hospital. It is an outpatient procedure which means that you will come in and out of the hospital the same day and do not stay overnight. The nurse will admit you to the unit. You will be asked to change into a medical gown and lie down on a stretcher. You will then be brought into the procedure room. Practices may vary among doctors, but, as a rule, a small intravenous will be started prior to the test through which medications are administered that will make you drowsy and lessen any discomfort. In fact, many patients may even fall asleep during the procedure and not remember anything about the test. This is called “conscious sedation” and is not a general anaesthetic. One is able to breathe on their own without any assistance. Some patients may have this test without intravenous medications. One’s throat may be sprayed before the procedure to prevent any gagging. However the drugs that are given thru the intravenous are very effective in dealing with the gag reflux. While you are lying on your left side, the gastroscope, which is a thin flexible tube with a video camera on the end, is passed through the mouth and back of the throat into the esophagus, stomach, and duodenum. As the gastroscope does not go down the breathing tube, the procedure does not interfere with one’s breathing. Air is introduced through the scope to expand the stomach that is normally collapsed in order to better examine it. One may feel the air as a pressure discomfort in the abdomen or bloating, and there may be a need to burp. During the procedure, if there is fluid in your mouth, the nurse will suction it out. Fluid in the stomach or duodenum can be aspirated out thru the scope. Water can be instilled thru the scope to clear away debris. The test may take 10 minutes as a rule.
THERAPEUTICS

Various therapeutic procedures can be performed thru the scope.
*BIOPSIES: In this technique a forceps is placed thru a biopsy channel in the scope and small bites are obtained from the lining. There is no discomfort in taking a biopsy.
*DILATATION: If there is a narrowing in the esophagus or food pipe, stomach or duodenum this can be stretched or dilated. A balloon can be placed thru the scope and inflated at the narrowing to stretch it. Another technique involves placing a guide wire thru the scope and then thru the narrowing. The scope is removed and dilators can then be placed over the guide wire.
*BANDING: Rubber bands can be placed around varices or veins in the esophagus, or other bleeding sites.
*METAL CLIPS: Metal clips can be placed on bleeding sites such as an ulcer.
*THERMAL COAGULATION AND ARGON PHOTOCOAGULATION: Heat can be used to control bleeding.
*POLYPECTOMY: Polyps or bumps in the lining that can have a precancerous potential can also be removed by used a snare or wire loop. A cutting and coagulating current is then sent thru the snare.
*REMOVAL OF FOREIGN BODIES: Foreign bodies such as food that can get stuck behind a stricture or narrowing in the esophagus or swallowed objects such as coins or dentures can be removed.
*ESOPHAGEAL STENTS: Esophageal stents or metal tubes can be placed that can bridge a cancer or benign narrowing to keep it open so one can swallow.

WHAT ABNORMALITIES CAN A GASTROSCOPY IDENTIFY:
*ESOPHAGITIS or inflammation in the esophagus from reflux where acid comes up from the stomach
*ESOPHAGEAL VARICES or dilated veins in the esophagus from liver disease that can bleed
*ESOPHAGEAL CANCER
*GASTRIC OR STOMACH CANCER
*GASTRIC OR DUODENAL ULCERS
*GASTRITIS that is an inflammation in the lining of the stomach
*DUODENITIS that is an inflammation in the lining of the duodenum
*CELIAC DISEASE

WHAT HAPPENS AFTER THE TEST

After the test, you will be monitored in the recovery area until the effects of the medication have worn off. Your throat may be sore for a while and you may feel bloated for several hours because of the air that was introduced to better examine your stomach. You will be able to resume your diet after you leave the procedure area. In most circumstances, your doctor will inform you of the results of the endoscopy before you leave. The results of the biopsies may take several days before they are available. If you subsequently develop severe abdominal pain, fever and chills, significant vomiting, or the passage of red blood or black stools from your rectum, you should contact your physician immediately. You will be able to resume your normal activities the following day. Due to the sedation, you cannot drive your car for the next 24 hours and you should arrange to have someone take you home.
POTENTIAL COMPLICATIONS

Gastroscopy is a safe procedure. Complications are more likely to occur when a procedure is performed through the scope and rarely require urgent treatment and surgery.

* Irritation of the vein with a tender lump may occur at the spot where the medication was injected. Applying heat packs or hot moist towels may help relieve the discomfort.

* Damage can occur to the teeth, gums, or back of the throat from introduction of the scope. A sore throat is a common side effect and may last for one to two days. Throat lozenges can be helpful.

* Bleeding that rarely requires a blood transfusion or surgery.

* Allergic reactions to the drugs with rash and fever.

* Slowing of the heart and breathing from the sedation.

* Fluid can get into the lungs that can cause a pneumonia.

* Perforation or a hole could be made requiring surgery.

* Death is extremely rare but remains a remote possibility.

* Heart attack, irregular heart beats, or stroke that are more likely in patients with underlying medical problems.

* Infections.

Major complications can occur in 1 in 1000 procedures.