

## UPPER ENDOSCOPY (EGD)

An upper endoscopy, often referred to as endoscopy, EGD (or Esophago-Gastro-Duodenoscopy) is a procedure that allows a physician to directly examine the upper part of the gastrointestinal (GI) tract. This included the esophagus (swallowing tube), the stomach, and the duodenum (the first part of the small intestine).

The physician who performs the procedures, known as an endoscopist, has special training in using an endoscope to examine the upper GI system, looking for inflammation, bleeding, ulcers, or tumors.

The most common reasons for upper endoscopy include:

- Unexplained discomfort in the upper abdomen
- GERD or gastroesophageal reflux disease (often called heartburn)
- Persistent nausea and vomiting
- Upper GI bleeding (vomiting blood or blood found in the stool that originated from the upper part of the gastrointestinal tract). Bleeding can be treated during the endoscopy.
- Difficulty swallowing: food/liquids getting stuck in the esophagus during swallowing.
- Abnormal or unclear findings on an upper GI x-ray, CT scan or MRI.
- Removal of a swallowed object
- To check healing or progress on previously found polyps (growths), tumors, or ulcers.

### *ENDOSCOPY PREPARATION*

You may be asked not to eat or drink anything for up to eight hours before the test. It is important for your stomach to be empty to allow the endoscopist to visualize the entire area and to decrease the possibility of food or fluid being vomited into the lungs while under sedation (called aspiration).

You may be asked to adjust the dose of your medications or to stop specific medications (such as aspirin, Plavix and/or diabetes medications) temporarily before the examination. You should discuss your medications with your physician before your appointment for the endoscopy.

You should arrange for a friend or family member to escort you home after the examination. Although you will be awake by the time you are discharged, the medications used for sedation cause temporary changes in the reflexes and judgment and interfere with your ability to drive or make decisions (similar to the effects of alcohol).

### *WHAT TO EXPECT DURING ENDOSCOPY*

Prior to the endoscopy, the staff will review your medical and surgical history, including current medications. A physician will explain the procedure and ask you to

sign a consent. Before signing the consent, you should understand all the benefits and risks of the procedure, and should have all of your questions answered.

An intravenous line (a needle inserted into a vein in the hand or arm) will be started to deliver medications that will put you to sleep. The medication propofol is usually used for the procedure, but other medications, such as a narcotic or a sedative, may also be used in conjunction with propofol.

Your vital signs (blood pressure, heart rate, and blood oxygen level) will be monitored before, during, and after the examination. The monitoring is not painful. Oxygen is often given during the procedure through a small tube that sits under the nose and is fitted around the ears. For safety reasons, dentures should be removed before the procedure.

#### *THE ENDOSCOPY PROCEDURE*

The procedure typically takes between 10 and 20 minutes to complete. The endoscopy is performed while you lie on your left side. Sometimes the physician may give a medication to numb the throat (either a gargle or a spray). A plastic mouth guard is placed between the teeth to prevent damage to the teeth and scope.

The endoscope (also called a gastroscope) is a flexible tube that is about the size of a finger. The scope has a lens and a light source that allows the endoscopist to look into the scope to see the inner lining of the upper gastrointestinal tract, or to view it on a TV monitor. Most people have no difficulty swallowing the flexible gastroscope as a result of the anesthesia, as you will be asleep during the procedure.

The endoscopist may take tissue samples called biopsies (not painful), or perform specific treatments (such as dilation, removal of polyps, treatment of bleeding), depending upon what is found during the examination. Air is introduced through the scope to open the esophagus, stomach, and intestine, allowing the scope to be passed through these structures and improving the endoscopist's ability to see all of the structures. You may experience a mild discomfort as air is pushed into the intestinal tract. This is not harmful and belching may relieve the sensation.

#### *ENDOSCOPY RECOVERY*

After the endoscopy, you will be observed while the sedative medication wears off. The medicines cause most people to temporarily feel tired or have difficulty concentrating and you should not drive or return to work after the procedure.

The most common discomfort after the examination is a feeling of bloating as a result of the air introduced during the examination. This usually resolves quickly. Some patients also have a mild sore throat. Most patients are able to eat shortly after the examination.

#### *ENDOSCOPY COMPLICATIONS*

Upper endoscopy is a safe procedure and complications are uncommon. The following is a list of possible complications:

- Aspiration (inhaling) of food or fluids into the lungs, the risk of which can be minimized by not eating or drinking for the recommended period of time before the examination.
- The endoscope can cause a tear or hole in the tissue being examined. This is a serious complication but fortunately occurs only rarely.
- Bleeding can occur from biopsies or the removal of polyps, although it is usually minimal and stops quickly on its own or can be easily controlled.
- Reactions to the sedative medications are possible; the endoscopy team (doctors and nurses) will ask about previous medication allergies or reactions and about health problems such as heart, lung, kidney, or liver disease. Providing this information to the team ensures a safer examination.
- The medications may produce irritation in the vein at the site of the intravenous line. If redness, swelling, or discomfort occurs, you should call your endoscopist or primary care provider, or the number given by the nurse at discharge.

The following signs and symptoms should be reported immediately:

- Severe abdominal pain (more than gas cramps)
- A firm, distended abdomen
- Vomiting
- Any temperature elevation
- Difficulty swallowing or severe throat pain
- A crunching feeling under the skin of the neck

#### *AFTER UPPER ENDOSCOPY*

Most patients tolerate endoscopy very well and feel fine afterwards. Some fatigue is common after the examination, and you should plan to take it easy and relax the rest of the day.

The endoscopist can describe the result of their examination before you leave the endoscopy unit. If biopsies have been taken or polyps removed, you should call for results within one to two weeks.