Endoscopic Ultrasound/ EUS

ROSWELL PARK
COMPREHENSIVE CANCER CENTER

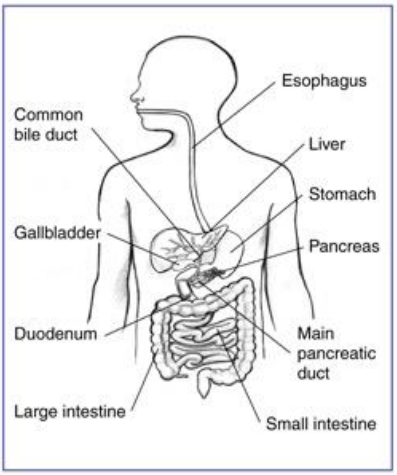
PATIENT EDUCATION

Overview

An endoscopic ultrasound (EUS) combines two technologies, endoscopy and ultrasound. It allows your doctor to 'see through' the walls of the gastrointestinal (GI) tract and directly examine nearby structures.

EUS is most commonly used to help diagnose and stage cancer. *Staging* means to find out if, and how far, the cancer has progressed. EUS is also useful in evaluating abnormalities found during routine tests.

During EUS, the doctor can take sample tissues (biopsies) from suspicious areas and send them to the pathology department to find out whether they are cancerous or not (benign).



The information gained from this test helps in making treatment decisions. Knowing the extent of a tumor helps determine whether surgery is necessary, and whether it would be helpful to have chemotherapy or radiation before the surgery.

EUS is used in areas that may be difficult to examine otherwise, such as:

- esophagus (food pipe from mouth to stomach)
- stomach
- duodenum (first part of the small intestine)
- pancreas, liver, bile ducts
- mediastinum (chest area between the lungs that contains the heart and parts of the trachea and esophagus)

What Happens During EUS?

There are no incisions or stitches needed for an EUS; the endoscope takes the same path as food - it goes into your mouth and down your esophagus.

During a standard endoscopy, doctors use a flexible tube-like instrument with a camera at the end (*endoscope*) to see the inside of the GI tract. For an EUS, the endoscope also has a tiny ultrasound probe attached to the end.

As the endoscope moves through the upper GI tract, the probe sends out sound waves that bounce off tissues and organs. A computer collects these sound wave echoes and turns them into images that your doctor sees on a monitor. Using EUS, doctors can get pictures of nearby organs such as the pancreas and bile ducts - structures that are not visible with standard endoscopy.

How Long Will the Procedure Take?

The procedure itself usually takes between 30 and 60 minutes. You should plan on spending up to 4 hours at Roswell. This includes preparation, time for the sedative to work, the EUS procedure, and recovery.

Preparation

- On the day before your procedure, eat a regular breakfast, a light lunch, and a light dinner. For light meals, eat foods low in protein and carbohydrates. Avoid fatty, greasy and fried foods.
- **Stop all food and drink 8 hours before your procedure except for water.**
- **Stop drinking water 2 hours before your procedure.**
- **You must have someone to drive you home after your test,** because the medication used to help you relax or sleep will keep you from being able to drive for a day.

During the Procedure

- EUS is usually done as an outpatient procedure.
- Before your procedure, an IV (intravenous) will be started so we can give you medication to help you relax and feel drowsy.
- The doctor will numb your throat by having you drink medication or by spraying it into the back of your throat.
- The endoscope is guided into your mouth and advanced gently into the esophagus, stomach, and duodenum.
- If biopsies are needed, the ultrasound images can be used to guide a needle into the suspicious area for a fine needle aspiration (FNA).

- After the EUS, you will go to the recovery area. The nurses will monitor you until you are fully awake. This usually takes about 2 hours.
- You will not be able to eat or drink anything until the medicine that was used to numb your throat wears off and your gag reflex returns

After the Procedure

- You may have a sore throat for 1-2 days. Throat lozenges or ice chips may help ease soreness.
- You may be sleepy for several hours or more because of the sedative you were given.
- Do not drive, operate dangerous machinery, or drink alcohol for 24 hours after your procedure.

What are the Risks?

Very rarely, the GI tract may be perforated (pierced), and fluid can leak into the abdominal cavity. It is also possible, but not common, for the procedure to cause bleeding, infection, or pancreatitis. Ask your doctor how these risks apply to you.

When Should I Call the Doctor?

Call your doctor if you have:

- severe abdominal pain
- severe nausea or vomiting
- **a fever of 100.4°F (38°C) or higher**

Questions or Concerns

If you have questions, call the GI clinic at **(716) 845-4010**. We are open Monday - Friday, 8am to 5pm. After hours and on weekend and holidays, call (716) 845-2300.

Notes