Endoscopic Ultrasonography (EUS)

Medical Imaging of the Digestive Tract and Internal Organs
More Detailed Pictures for Better Diagnoses

Endoscopic ultrasonography allows your doctor to examine your stomach lining as well as the walls of your upper and lower gastrointestinal (GI) tract. EUS is also used to study internal organs that lie next to the GI tract such as the gallbladder and pancreas. This procedure provides your doctor with more information than other medical imaging tests and is used to diagnose the cause of certain conditions, evaluate abnormalities and help determine the best treatment.

How it Works

The EUS procedure uses a thin, flexible tube called an endoscope to deliver an ultrasound imaging device to the area to be examined inside your body. Your endoscopist will pass the endoscope through your mouth or anus, to the area of interest. Your doctor will then turn on the ultrasound attachment to produce sound waves that create highly detailed, visual images of the surrounding area.

*With the EUS scope in the stomach, a cyst in the pancreas is showed in the pancreas.*
Why EUS is Used
EUS is most often used to examine the upper gastrointestinal tract (esophagus, stomach and duodenum) and the lower tract (colon and rectum). Your doctor can use EUS to diagnose the cause of conditions such as abdominal pain or abnormal weight loss. It is also used to evaluate abnormalities, such as lumps that may have been detected at a prior endoscopy. In addition, EUS can be used to diagnose diseases of the pancreas, bile duct and gallbladder when other tests are inconclusive. If your doctor has ruled out certain conditions, EUS can confirm your diagnosis and give you a clean bill of health.

How EUS Helps Treat Cancer
EUS helps doctors determine the extent of certain cancers of the digestive and respiratory systems and can accurately assess the cancer’s depth and whether it has spread to adjacent lymph glands. EUS can also be used to obtain biopsies to help your doctor determine the proper treatment.

How to Prepare for an EUS Procedure
For EUS of the upper gastrointestinal tract, you should have nothing to eat or drink (not even water) for approximately six hours before the procedure. Your doctor will tell you when to begin fasting.

For EUS of the rectum or colon, your doctor will instruct you to either consume a large volume of a special cleansing solution or to follow a clear liquid diet combined with laxatives or enemas prior to the procedure. The examination might have to be rescheduled if you don’t follow your doctor’s instructions carefully.
Current Medications

You can take most medications as usual until the day of your EUS procedure. Tell your doctor about all of the medications that you are taking and any medication allergies you have. Anticoagulant medications (blood thinners such as Coumadin and Plavix) might need to be adjusted before your EUS procedure. Check with your doctor in advance regarding these prescriptions. In general, you can safely take aspirin and non-steroidal, anti-inflammatory (ibuprofen, naproxen, etc.) up to five days before an EUS procedure, but it is always best to check with your doctor. On the morning of your exam, be sure to check with your doctor about which medications to take, and only take those essential medications with a very small cup of water.

If you have an allergy to latex, inform your doctor prior to the test. Patients with latex allergies often require special equipment and might not be able to have an EUS examination.

Antibiotics

Antibiotics aren’t generally required before or after an EUS procedure, but do tell your doctor if you take antibiotics before dental procedures. If your doctor feels you need antibiotics, they might be ordered during or after the EUS procedure to help prevent an infection. Your doctor might prescribe antibiotics if you’re having a specialized EUS procedure, such as to drain a fluid collection or a cyst using EUS guidance. Again, tell your doctor about any allergies to medications.
What to Expect During EUS

For an EUS exam of the upper GI tract, your endoscopist might spray your throat with a local anesthetic before the test begins. Usually, you will receive sedatives intravenously to help you relax. You will most likely begin by lying on your left side. After receiving sedation, your endoscopist will pass the scope through your mouth, esophagus and stomach into the duodenum. The instrument does not interfere with your ability to breathe. The actual exam generally takes between 15 and 45 minutes. Most patients consider it only slightly uncomfortable, and many fall asleep during the procedure.

An EUS exam of the lower GI tract can often be performed safely and comfortably without medications. You will receive sedation if the procedure will be prolonged or if the doctor will examine a significant distance into the colon. You will start by lying on your left side with your back toward the doctor. Most EUS examinations of the rectum last from 10 to 30 minutes.
What to Expect After EUS

Because you receive sedation, you will be monitored in the recovery area until most of the medication’s effects have worn off. If you had an upper EUS, your throat might be a little sore. You might feel bloated because of the air and water that were introduced during the procedure. You will be able to eat after you leave the procedure area, unless you are instructed otherwise.

You won’t be allowed to drive after the procedure, even if you don’t feel tired. You should arrange for a ride home. You should also plan to have someone stay with you at home after the examination, because the sedatives could affect your judgment and reflexes for the remainder of the day.

Your doctor will usually inform you of the results of the exam on the same day. However, some tests may take several days for the results to return.

Possible Complications of EUS

When doctors with specialized training and experience perform the EUS examination, complications are extremely rare. Bleeding might occur at the biopsy site, but it is usually minimal and rarely requires a follow up. You might have a slight sore throat for a day or so. Non-prescription, anesthetic-type throat lozenges can help soothe a sore throat.

Other potential, but uncommon risks of EUS include a negative reaction to the sedative used, aspiration of stomach contents into your lungs, infection and complications from heart or lung diseases. One major, but very uncommon complication of EUS is perforation — a tear through the lining of the intestine that might require surgery to repair. The possibility of
complications will increase slightly if a deep needle biopsy is performed during the EUS examination.

All of these risks must be balanced against the potential benefits of the procedure and the risks of alternative approaches to the condition.

**To schedule an appointment with the Florida Hospital Center for Interventional Endoscopy, call our care coordinator at (407) 303-2570 or visit FHCIE.com.**

The preceding information is intended only to provide you with general information and does not serve as a definitive basis for diagnosis or treatment in any particular case. It is very important to consult with your doctor about your specific condition.

**About the Center for Interventional Endoscopy**

The Center for Interventional Endoscopy (CIE) integrates therapeutic endoscopy with minimally invasive surgery to provide the highest quality care for patients with complex digestive issues. At CIE we perform nearly 4000 EUS procedures annually. We are the largest EUS program in the United States and the 3rd largest in the World. The CIE doctors conduct cutting-edge clinical trials that are paving the way for new innovations in treatment. The doctors are well-published and author the #1 best seller textbook in the field entitled ENDOSONOGRAPHY. The research studies offer you access to some of the most advanced care in the world. You may be approached by one of the doctor’s or the research staff to find out more about your willingness to participate in research which is totally voluntary.
Florida Hospital is a trusted member of one of America’s largest, not-for-profit healthcare systems.

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