Endoscopic Ultrasound (EUS)

Endoscopic ultrasound, also referred to as EUS, is a procedure that combines both traditional endoscopy and ultrasound imaging to obtain information about the digestive tract, surrounding tissues and organs. With EUS, a small ultrasound transducer is embedded with a microchip television camera on the tip of an endoscope. The scope is inserted into either the upper or lower digestive tract. The EUS transducer gets closer to the organs than with traditional ultrasound, so the images are more accurate and more detailed. EUS provides information about the layers of the intestinal wall, as well as adjacent structures such as lymph nodes and blood vessels.

EUS is helpful in the evaluation of patients with abnormalities of the bile duct or gallbladder such as stones. It is helpful in the evaluation of chronic pancreatitis and other masses or cysts of the pancreas. It is used to study cancers of the digestive tract. It can be used to look at the muscle of the lower rectum and anal canal in evaluating reasons for fecal incontinence.

Abnormalities seen with ultrasound imaging can be biopsied using a process called fine needle aspiration or FNA. This is very helpful in determining if a lesion is benign or if it needs more immediate attention. Cytopathologists are available to analyze the biopsy in the laboratory to assist with an immediate diagnosis.

Our physicians use EUS guidance to perform celiac plexus block for pain control in patients with chronic pancreatitis and pancreatic cancer. Drainage of pancreatic pseudocysts can also be performed with EUS guidance.

Prior to the procedure:

You should not eat or drink anything after midnight the day before your procedure – or for at least 8 hours prior to the start of your procedure. Please discuss with your doctor whether he wants you to take any of your daily medicines on the morning of your procedure, for example, medicine for your blood pressure.

What to expect during the procedure:

A monitor will record your blood pressure, pulse, blood oxygen levels, as well as the heart rate and rhythm throughout the procedure. Your doctor will give you medicine through an IV to help you relax and be more comfortable during the procedure.

You’ll lie on your side, and your doctor will pass the endoscope through your mouth and into the esophagus, stomach, and duodenum. The endoscope doesn’t interfere with your
breathing. Most patients consider the test only slightly uncomfortable, and many patients fall asleep during the procedure.

**What to expect after the procedure:**

The procedure itself usually takes about 30 minutes, although you should plan on being at the hospital for about two to three hours. This includes preparation and recovery time. The medicine you receive may make it difficult for you to remember what the doctor or nurses tell you after your procedure. It is helpful to have someone with you who can also hear the instructions and stay with you on the day of the procedure.

You cannot operate machinery or drive a motorized vehicle for 24 hours after the procedure. Please make arrangements for someone to be at the hospital to take you home. Please see [endoscopy discharge instructions](#) in the patient resources section of this website.