

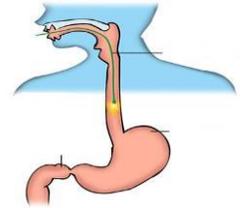
## Understanding Endoscopic Ultrasound (EUS)

You have been referred to have an endoscopic ultrasound, or EUS, which will help your doctor evaluate or treat your condition. This information sheet will give you a basic understanding of the procedure - how it is performed, how it can help, and what side effects you might experience. It may not answer all of your questions. Please ask about anything you don't understand.

### What is EUS?

EUS allows your doctor to examine the lining and the walls of your oesophagus, stomach and duodenum. EUS is also used to study internal organs that lie next to the gastrointestinal tract, such as the gall bladder and pancreas.

A thin, flexible tube (echoendoscope) will be passed through your mouth to the area to be examined. An ultrasound transducer is present at the tip of the instrument. The ultrasound component will then produce ultrasound waves that create detailed visual images of the area to be studied.

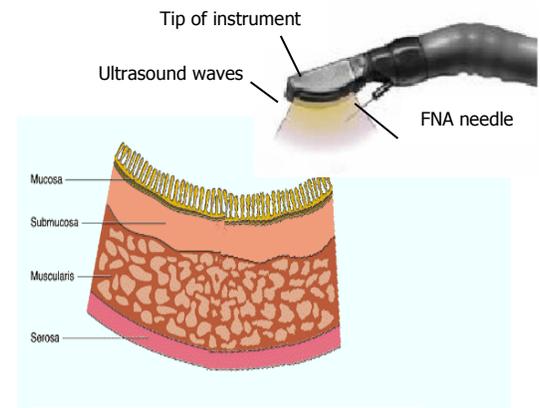
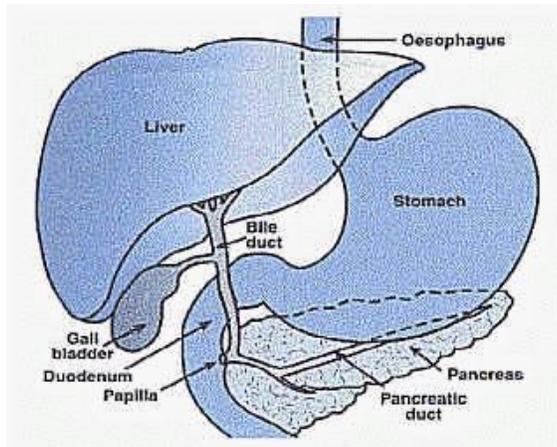


Echoendoscope

### Why is EUS done?

EUS is used to evaluate an abnormality, such as a growth, that was detected at a prior endoscopy or by x-ray or scan. EUS provides a detailed picture of the growth, which can help your doctor determine its nature and decide upon the best treatment. If the growth arises from the wall of the digestive tract, EUS can help determine which layer in the wall the growth arises from. In some circumstances a thin needle can be passed through the endoscope into the growth to suck up (aspirate) cells. This is known as Fine Needle Aspiration (FNA).

In addition, EUS can be used to diagnose diseases of the pancreas, bile duct and gallbladder when other tests are inconclusive.



Close up of wall of the digestive tract

### Why is EUS used for patients with cancer?

EUS helps determine the extent of certain cancers of the digestive and respiratory systems. EUS allows your doctor to accurately assess the cancer's depth and whether it has spread to adjacent lymph glands or nearby vital structures such as major blood vessels. In some patients, EUS can be used to obtain tissue samples to help your doctor determine the proper treatment (FNA).

### **How should I prepare for EUS?**

For EUS of the upper gastrointestinal tract, you should have nothing to eat or drink, not even water, usually six hours before the examination. Your doctor will tell you when to start this fasting.

### **What about my current medications or allergies?**

In general, you can safely take aspirin and nonsteroidal anti-inflammatories before an EUS examination. However if an FNA is to be performed, aspirin, plavix/clopidogrel, asasantin, nonsteroidal anti-inflammatories and warfarin must be stopped for 5 days before the procedure.

If you have an allergy to latex you should inform your doctor prior to your test.

### **Do I need to take antibiotics?**

Antibiotics are sometimes required before or after EUS examinations if you're having specialized procedures, such as to drain a fluid collection or a cyst using EUS guidance. This helps prevent infection. Tell your doctor if you take antibiotics before dental procedures. Again, tell your doctor about any allergies to medications.

### **Should I arrange for help after the examination?**

You will receive sedatives so you won't be allowed to drive after the procedure until the next day, even if you don't feel tired. You should arrange for a ride home. You **must** have someone stay with you at home after the examination, because the sedatives could affect your judgment and reflexes for the rest of the day.

### **What can I expect during EUS?**

You will receive sedatives intravenously to help you relax. You will most likely begin by lying on your left side. After you receive sedatives, the procedure will commence. The instrument does not interfere with your ability to breathe. The actual examination generally takes between 30 to 60 minutes.

### **What happens after EUS?**

If you received sedatives, you will be monitored in the recovery area until most of the sedative medication's effects have worn off. Your throat might be sore. You might feel bloated because of the air and water that were introduced during the examination. You'll be able to eat after you leave the procedure area, unless you're instructed otherwise.

Your doctor will inform you of the results of the procedure that day, but the results of some tests will take longer. Expect to be in the hospital for a total of 3 to 4 hours.

### **What are the possible complications of EUS?**

Although complications can occur, they are rare. You might have a sore throat for a day or more. Other potential, but uncommon, risks of EUS include a reaction to the sedatives used; backwash of stomach contents into your lungs; infection; and complications from heart or lung diseases. One major, but very uncommon, complication of EUS is perforation. This is a tear through the lining of the intestine that might require surgery to repair.

The possibility of complications increases slightly if a fine needle aspiration is performed during the EUS examination. Pancreatitis (inflammation of the pancreas) is a rare complication if FNA is performed of the pancreas – this can result in abdominal pain and fever and rarely, cysts can form. If pancreatitis occurs you will be admitted to hospital. These risks must be balanced against the potential benefits of the procedure and the risks of alternative approaches to the condition.

**The test is not perfect. Occasionally, important lesions may not be seen, and FNA attempts may be unsuccessful.**

### **Additional Questions?**

If you have any questions about your need for EUS, alternative approaches to your problem, the cost of the procedure, methods of billing, do not hesitate to speak to your doctor or doctor's office staff about it.