

What is an endoscopic ultrasound?

Endoscopic ultrasound (EUS) is a procedure combining regular endoscopy with ultrasound to look at your upper or lower gastrointestinal system. Endoscopy allows us to look directly at the lining of your gut using a camera. Ultrasound is the use of high frequency sound waves allowing us to see detailed images of the gut wall as well as structures beneath the surface. For EUS we use a special endoscopy/ultrasound scope which is a long flexible tube (about the size of your little finger) with a light and miniaturised ultrasound probe at the end. Depending on your reason for having the test, the scope can be passed into the mouth, and through the oesophagus and stomach into the duodenum to see structures in the upper abdomen. Alternatively it may be placed into your rectum to look at structures in that area.

Why am I having an EUS?

Your doctor has requested this procedure to help investigate and manage your medical condition. Hopefully this was explained adequately to you but if not we are very happy for you to ask further questions before the procedure.

Sometimes EUS is used to take a fluid or tissue samples; this is done by passing a small needle through the scope to obtain the samples which are sent to the laboratory for analysis.

In certain conditions EUS is also used to guide a special injection as treatment for severe pain, this is called a coeliac plexus neurolysis (CPN). Please see our separate information sheet regarding this procedure.

EUS may also be used to guide other procedures such as cyst or abscess drainage, or unblocking the bile duct.

Are there any alternatives to an EUS?

Due to the unique information obtained from an EUS there are no real alternatives although sometimes other radiological tests may give the answers required.

Getting ready for the procedure

If you are on any blood thinners other than aspirin these will usually need to be stopped. Please make sure this is discussed with your doctor or one of our nurses who will contact you by phone before the procedure.

Make sure you have nothing to eat for six hours before the procedure. You can drink water until two hours before. Wear loose fitting washable clothing and leave valuables at home.

On arrival at the department, we will explain the procedure to you and ask you to sign a consent form. You can change your mind about having the procedure at any time.

You will have an IV cannula placed so that we can give you a sedative during the procedure. The injection may continue to have a mild sedative effect for up to 18 hours and may leave you unsteady on your feet for a while. **You must arrange for a responsible adult to come with you and take you home. You will not be able to drive. If you come without an escort, we will have to cancel the procedure.**

What happens during the procedure?

In the procedure room, we will ask you to remove false teeth, glasses, and hearing aids from the left ear. A spray will be given with local anaesthetic to numb your throat. We will make you comfortable on a bed lying on your left side. A mouth guard will be put gently between your teeth so that you do not bite and damage the instrument. You will then

[continued]

be given the sedative into your vein. This will make you sleepy and relaxed.

As the instrument is gently passes the tube through your mouth you may gag slightly, this is quite normal and will not interfere with your breathing.

The procedure is performed under sedation (not a general anaesthetic). The level of sedation is such that generally no discomfort should be experienced. The procedure usually takes around 30 minutes. We will monitor your pulse and oxygen levels during the procedure. For your comfort and reassurance, a trained nurse will stay with you throughout the procedure.

What can go wrong?

In general EUS procedures are very safe and most people have no significant problems. It is common to feel some throat discomfort or bloating afterwards due to the camera passing down your throat and gas blown into your gut during the procedure.

With all endoscopic procedure there is a slight risk to teeth, crowns or dental bridgework and you should tell nursing staff if you have these. Other rare complications include aspiration pneumonia (inflammation of the lungs caused by inhaling or choking on vomit) and adverse reactions to intravenous sedative drugs and, when used, antibiotic treatment.

Diagnostic endoscopic ultrasound procedures carry a very small risk (1 in 10,000 cases) of bleeding or perforation (tear) of the gut following which surgery may be necessary. The use of guided needle sampling slightly raises the risk of haemorrhage but the risk remains very low. The risk of perforation is about 1 in 1,000 when using an endoscope to take samples with EUS. There is a similar risk of causing inflammation of the pancreas (pancreatitis). Infection can rarely occur during aspiration of cysts, so you may be given antibiotics to reduce the chance of this happening.

Like all tests this procedure will not always show up all abnormalities and sometimes we may not be able to get all the desired information.

What happens after the procedure?

When you are sufficiently awake, you may go home. You are advised not to drive, bike, operate machinery, drink alcohol or sign legally binding documents for the next 18 hours. You are also advised to have a responsible adult stay with you for the next 12 hours. Afterwards the back of your throat may feel sore for the rest of the day but this should settle quickly.

If you have any of the following, you should contact your GP or present directly to the hospital emergency department.

- severe pain,
- black tarry stools
- persistent bleeding

When do I know the result?

The endoscopist will give you information about the procedure once you are ready to go home. It is a good idea to have someone with you when you talk to the endoscopist because the sedation can affect your ability to remember the discussion. You will be given a report to take home with you and this will also be sent to your referring doctor.

Final results from biopsies will be given to you by the healthcare professional who requested the procedure either at a clinic appointment or by letter. These results can take several weeks to come through. You should discuss details of these results and any further treatment with your referring doctor.

Contact us

Gastroenterology Department
Level 6 Clinical Support block
Wellington Regional Hospital

Phone: (04) 385 5999 extension 6223
Appointment enquiries: (04) 385 5999
ext 5169