

Having an Endoscopic Ultrasound

Information and advice for patients

Endoscopy

What is an Endoscopic Ultrasound (EUS)?

An EUS is a specialist test not available at all hospitals. It is a technique where a flexible lighted tube with additional equipment that produces ultrasound images to examine you in more detail, is passed into the mouth and down into the gullet and stomach. This procedure is usually performed under sedation. You can also have a local anaesthetic spray to the throat. It is used to assess the chest, gullet, stomach and surrounding organs including the pancreas, lymph nodes or major blood vessels.

What are the benefits of this procedure?

An EUS allows a more detailed assessment of the tissue and surrounding organs. The ultrasound component allows the deeper structures to be seen rather than just the surface lining. Biopsies (tissue samples) can sometimes be taken during this test. It is not a painful test and takes 30-45 minutes, but if it takes longer you should not worry.

What are the risks of the procedure?

As with any procedure, there are risks associated with the test and with the sedation given.

- There is a risk of perforation (making a hole or tear) in the oesophagus. This is a rare complication (1 in 1,000 cases) but may require an operation to repair the damage.
- There is a small risk of bleeding (1 in 1,000 cases), which may be serious enough for you to be admitted to hospital and treated with a blood transfusion.
- Sometimes we need to take a biopsy (tissue sample) from the pancreas. There is a rare (1:1000) risk that this can cause an infection called pancreatitis which may require hospital admission.
- There is a slight risk of damage to your teeth crowns or bridgework. You should tell the nurse if you have either of these.
- Sedation can reduce the breathing rate, heart rate and blood pressure. You will be monitored throughout the procedure.

What are the side-effects of the procedure?

You may have bloating and abdominal discomfort for a few hours following the procedure as air is used to inflate your stomach. You may have a sore throat for up to 24 hours.

What are the alternatives to the procedure?

This is usually the best form of examination for your condition. Occasionally other forms of imaging such as CT and MRI may provide some of the information, but if you wish to discuss what it would mean to decline this test, you would need to speak to your doctor.

What are the risks of not having the procedure?

You've been referred for this procedure to look for conditions affecting your oesophagus, stomach and pancreas. If you do not undergo the test, we may not be able to detect an abnormality that would require further treatment.

What do I need to do before I attend for an EUS

Before you arrive, you will have to prepare your stomach. To allow a clear view during your EUS the stomach must be empty. Do not have ANYTHING to eat or drink for at least 6 hours before the test.

If you need the help of an interpreter to understand any of this information, or on the day of the procedure, please contact us as soon as possible.

If you are unable to attend your appointment for any reason, please let us know as soon as possible so that your appointment can be offered to somebody else. **If you fail to attend without giving us more than 24 hours notice then you may not be offered another appointment.**

Medication

You may continue to take antacids e.g. Gaviscon or Asilone if required but not within 3 hours of the test.

If you take diabetic tablets or insulin, or tablets that thin the blood (such as warfarin, dabigatran, apixaban, rivaroxaban, edoxaban, clopidogrel/Plavix, prasugrel) please contact the unit as your appointment may need to be altered and you may need additional information.

You may continue to take your other usual medication. Please bring any medication you are currently taking (including sprays and inhalers) with you to your appointment, and details of any allergies or reactions to medicines in the past.

What happens when I arrive at the hospital?

Your appointment will last for 2-4 hours. When you arrive:

- Please report to the reception desk in the Endoscopy department where a receptionist will check your details and direct you to the waiting area.
- Please do not bring any valuables with you.
- Please do not wear any nail varnish, lipstick or jewellery. Please note that tongue studs must be removed.
- A doctor will explain the procedure to you in detail to make sure you understand the benefits and possible risks as detailed in this leaflet.

The staff will want you to feel as relaxed as possible and they will be pleased to answer any questions that you might have about the procedure. Provided you are satisfied for the

procedure to be performed, you will be asked to sign a consent form. This is to confirm your understanding and acceptance of the procedure. This form also asks for your consent to other procedures that may be necessary, including taking tissue samples (biopsies) that may be helpful in diagnosing your problem.

Sedation and Local Anaesthetic

An endoscopic ultrasound is usually best carried out using both a numbing throat spray and sedation, but you may request not to have a throat spray if you wish. Sedation will be given through a small needle into the back of your hand or into your arm. Sedation will make you sleepy and you may not remember the procedure taking place.

What happens during the procedure?

- The EUS will take place in a private room with only you, the endoscopist and nursing staff present. You will not have to undress or change into a gown. The test usually takes about 30-45 minutes.
- You will be asked once more if you are satisfied and understand the information and explanation that has been given to you about the procedure.
- If you have any dentures you will be asked to remove them at this point. Any remaining teeth will be protected by a small plastic mouth guard, which will be inserted immediately before the procedure commences.
- Local anaesthetic throat spray may be sprayed onto the back of your throat whilst you are sitting up. It has a bitter taste and may feel hot on the back of the throat when you are asked to swallow it down.
- A small plastic cannula (tube) will be placed into a vein in your hand or arm to administer your sedation medication.
- The nurse looking after you will ask you to lie on your left side and will then place the oxygen monitoring probe on your finger. This measures the amount of oxygen in your blood and also your heart rate.
- The sedative will be given at this time and you will quickly become sleepy.
- Any saliva or other secretions produced during the procedure will be removed using a small suction tube, like the one used at the dentist.
- The endoscopist will introduce the endoscope into your mouth, down your gullet and into your stomach and then into your duodenum (part of your digestive system which connects your stomach to your small intestine). Your windpipe is deliberately avoided and your breathing will not be affected.
- During the procedure, samples may be taken and will be retained. Any photographs taken will be recorded in your notes.

What happens after the test?

After the procedure, you will remain in the unit to rest for about an hour. After the procedure bloating, abdominal discomfort and a sore throat are normal for a few hours. After the procedure you will need to stay in the unit for up to two hours, as each person can react differently to sedation. A nurse will monitor your recovery.

Going home after you have received sedation

You can leave the unit when you have recovered from the effects of the sedation. It is essential that a responsible adult comes to pick you up from the unit and accompanies you home by car or taxi. Public transport is not suitable.

When you arrive home it is important to rest quietly for the remainder of the day with someone to look after you overnight. It is advisable you have the following day off work. Sedation can impair your reflexes and judgement. For the first 24 hours following sedation do not:

- When you arrive home, it is important to rest for the remainder of the day.
- **Someone should stay with you overnight.**
- It is advisable to have the next day off work.
- During the first 24 hours following sedation you must not:
 - Drink alcohol
 - Drive any vehicles (including riding a motorcycle or bicycle) it is illegal to drive under the influence of midazolam (a medication used for procedural sedation).
 - Take sleeping tablets
 - Operate any machinery or electrical items (including a cooker or kettle)
 - Sign any legally binding or important documents
 - Work at heights (including climbing ladders or onto chairs)

When will I know the results?

The test results will be explained to you before you are discharged from the unit. If biopsies are taken, this will be sent to the laboratory for testing and the results will take longer; we will explain when these results will be available. You will also be given a written report of your procedure and instructions as to what to do if you have any problems following the test and a copy of the results will be sent to your GP. If you need one, you will be given a clinic appointment.

How to contact us

If you have any questions or concerns please contact us.

Endoscopy unit 0121 507 5800

Monday - Friday, 8.00am - 6.30pm

If you are unable to keep your appointment, please telephone one of the above numbers as soon as possible so the appointment can be allocated to another patient.

Sources used for the information in this leaflet

European Society of Gastrointestinal Endoscopy (2006) Guidelines on complications of gastrointestinal endoscopy. Available at: <https://www.bsg.org.uk/clinical-resource/ercp-related-adverse-events-european-society-of-gastrointestinal-endoscopy-esge-guideline/> [Accessed 6th September 2023]

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A Teaching Trust of The University of Birmingham

Incorporating the Midland Metropolitan University Hospital, City Health Campus, Sandwell Health Campus and Rowley Regis Hospital.

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ML5881

Issue Date: March 2025

Review Date: March 2028