

## Endoscopy

# Understanding endoscopic ultrasound scan (EUS)

## Information for patients, relatives and carers

### Introduction

This leaflet should help you to prepare for your EUS procedure. Please read it at least one week before your appointment and follow the instructions carefully. If you cannot attend your appointment, please call us on **020 3312 6010** or email [imperial.endoscopyappointments@nhs.net](mailto:imperial.endoscopyappointments@nhs.net)

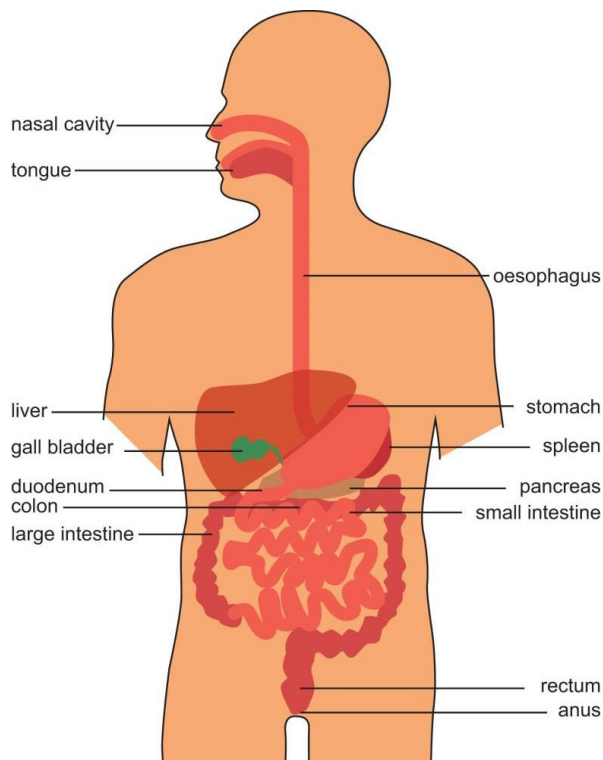
If you have any questions about preparing for this procedure, please contact the endoscopy department at Hammersmith Hospital on **020 3313 2645** where your procedure is booked and ask to speak to the nurse in charge.

### What should I do to prepare for my appointment?

- Read this leaflet carefully
- Double check the **date, time and location** of your EUS procedure
- Please contact us as soon as possible (at least **1 week** before your appointment) for advice if you are on any blood-thinning medications, such as warfarin, aspirin, dipyridamole, Clopidogrel (Plavix), apixaban (Eliquis), dabigatran (Pradaxa) or rivaroxaban (Xarelto) as you may need to stop taking them before the test. We will need to know why you are taking this medication. You do not need to stop taking aspirin
- Please contact us as soon as possible if you have diabetes. You should contact your GP or your diabetes nurse specialist for advice before your appointment
- Please contact us if you are breast feeding. You can continue to breast feed normally with the sedative medication we use - there is no harm to the feeding infant. It is important that someone stays with you for the 24 hours after the procedure in case you feel drowsy (sleepy) while feeding and caring for your infant
- Please let us know if you are or think you may be pregnant
- Arrange for a responsible adult to collect you after your procedure. They should stay with you for **12 hours** after your procedure. If you do not organise an appropriate escort, we will not be able to proceed with your EUS

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- On the day of your procedure, do not eat or drink anything for **6 hours** before your procedure

## What is EUS?



EUS is a technique which allows enhanced imaging of the oesophagus (food pipe), stomach, pancreas, liver and bile ducts using an endoscope. The exact organs being examined will depend on the individual reason for your procedure which will be discussed with you beforehand. EUS is used for many conditions including the staging of cancers, the diagnosis of pancreatitis, pancreatic cysts and bile duct stones.

After giving you sedation, an endoscope is passed through your mouth, down the oesophagus, past your stomach and into the first part of the small bowel. A special ultrasound probe (transducer) on the endoscope produces sound waves which create precise images of the surrounding organs. If necessary, biopsies (small samples of tissue) or aspirate (small sample of fluid) can be taken during the examination and sent to the laboratory for further investigation.

## Conscious sedation and throat spray

Conscious sedation is where a sedative and a painkiller are given into a vein (intravenously/IV). This makes you more relaxed and reduces any discomfort experienced during the procedure. The sedative may also make you forget parts of the test. Each patient will react differently and will experience different levels of sleepiness. It is not a general anaesthetic so you will be awake during the procedure.

After having conscious sedation, an adult friend or relative must escort you home and stay with you for 12 hours after your procedure. Please make sure that you have access to a telephone when you return home. If you have not been able to make these arrangements, please speak to the nursing staff. **We cannot give you sedation if you do not have an escort and so your procedure will have to be cancelled.**

It is not unusual to experience some symptoms of bloating or wind pain despite the sedative and painkiller. The sensation of gagging or retching may be felt as with anything touching the back of the throat.

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## Are there any alternatives to EUS?

The main alternatives to EUS are scans, such as an ultrasound, MRI or CT that can be used to provide images the internal organs. However, EUS can provide additional enhanced images and take fluid and tissue samples when needed.

EUS is therefore recommended when more detailed imaging or intervention is needed. Depending on the location of the abnormality CT or ultrasound-guided sampling through the skin may be an alternative option.

## Are there any risks associated with having an EUS?

EUS is generally a safe procedure but complications can occur. These are rare and mostly mild in nature. You may experience discomfort, nausea and bloating during the procedure. These symptoms are temporary and usually ease quickly afterwards.

Rare but serious risks related to EUS include but are not limited to:

- inflammation of the pancreas gland (known as pancreatitis) – typically after needle sampling of pancreatic tissue
- a hole in the gastrointestinal tract (perforation) which may require surgery to repair (1 in 3,000)
- bleeding from the gastrointestinal tract which may require blood transfusion or surgery to repair (1 in 1,000)
- allergic reaction to drugs given during the procedure
- aspiration pneumonia - inflammation of the lungs, caused by inhaling the contents of the stomach
- damage to crowned teeth or dental bridgework. It is important that you tell us about any crowns or bridgework before we start the test

The risk of complications may increase if you have any pre-existing heart or lung conditions. Your doctor will discuss any increased risks with you before you have the test.

## What happens on the day of my appointment?

To do the EUS safely you must have an empty stomach so please do not have anything to eat or drink (not even water, sweets or chewing gum) for at least **6 hours** before your appointment.

Please book in at the endoscopy unit at the time specified. Your procedure will be done as close to your appointment time as possible. Every effort is made to keep waiting times to a minimum, but it is not possible to predict how long individual procedures will take. You may wish to bring something to read.

In the pre-assessment room, we will take your details and discuss the procedure, any treatment, possible risks and side effects before asking for your written consent.

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We will place a drip into your hand or arm ready for the medications to be given later. We will ask you to change into a hospital gown and remove any dentures and glasses before taking you into the procedure room.

In the procedure room, the nursing staff will ask you questions as part of our pre-procedure safety checks. We will then:

- connect you to a monitor to record your blood pressure, pulse and oxygen levels
- give you some oxygen through a tube that is placed under your nose
- apply a throat spray

We will ask you to lie on your left side with your knees slightly bent. We will give you a mouth guard to protect your teeth. The doctor will give you a sedative and painkiller through your IV drip. You may also be given an antibiotic during the procedure. The endoscopist will then place the endoscope in your mouth and pass it down your throat and into your stomach. If any saliva collects in your mouth, the nurse will clear it with a small suction tube similar to that used by dentists. It is not unusual to experience gagging or retching. Please be assured that the endoscope will not interfere with your breathing.

## What happens after the test?

We will take you to the recovery area and monitor you while the sedatives wear off. You must be accompanied home by an adult relative or friend who must come to the unit to collect you in person. The effect of the conscious sedation can last for up to 24 hours so, during that time, you should not drive, operate machinery (including kitchen equipment), sign legal documents or drink alcohol.

If samples of tissue have been taken then you may have to wait longer (2 hours) before you can eat and drink. We will give you a written copy of your EUS report and discharge you to the care of your responsible escort.

## When will I get the results?

We will give you a copy of the EUS report and discuss the findings with you before you are discharged. It can take up to 2 weeks for biopsy results to be available and these will be sent to your referring doctor (GP or hospital doctor). Details of the results and any necessary treatment should be discussed with them at your next appointment. The endoscopy department will not be able to give you any biopsy results.

## Is there anything I need to watch out for at home?

It is normal to experience a sore throat, bloating and mild abdominal discomfort for a couple of days after your EUS. If you have any concerns after being discharged or have severe pain, black tarry stool (poo), are vomiting blood or have fever (high temperature) or chills please contact the endoscopy department at Hammersmith Hospital on **020 33136 2645** within working hours (09.00 – 17.00) and ask to speak to the nurse in charge.

Outside of working hours, please phone the hospital switchboard on **020 3313 1000** and ask to speak to the gastroenterology registrar on call for further advice. Alternatively, you can call your GP or NHS 111.

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## When can I get back to my normal routine?

You should be able to return to work and all your usual activities the following day unless otherwise advised by your doctor.

## How do I make a comment about my visit?

We aim to provide the best possible service and staff will be happy to answer any of the questions you may have. If you have any **suggestions** or **comments** about your visit, please either speak to a member of staff or contact the patient advice and liaison service (**PALS**) on **020 3312 7777** (10.00 – 16.00, Monday to Friday). You can also email PALS at [imperial.pals@nhs.net](mailto:imperial.pals@nhs.net) The PALS team will listen to your concerns, suggestions or queries and is often able to help solve problems on your behalf.

Alternatively, you may wish to complain by contacting our complaints department:

Complaints department, fourth floor, Salton House, St Mary's Hospital, Praed Street  
London W2 1NY

Email: [ICHC-tr.Complaints@nhs.net](mailto:ICHC-tr.Complaints@nhs.net)

Telephone: **020 3312 1337 / 1349**

## Alternative formats

This leaflet can be provided on request in large print or easy read, as a sound recording, in Braille or in alternative languages. Please email the communications team:  
[imperial.communications@nhs.net](mailto:imperial.communications@nhs.net)

## Wi-fi

Wi-fi is available at our Trust. For more information visit our website: [www.imperial.nhs.uk](http://www.imperial.nhs.uk)

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