



# Endo Bronchial Ultrasound Scan (EBUS)

## Information for patients from the Trust's Endoscopy Units

This information is for patients who are having an **Endo Bronchial Ultrasound Scan (EBUS)**. It explains what is involved and any significant risks there may be.

Students and trainees supervised by qualified members of staff may be involved in your care. If you do not wish students to be present, please tell the endoscopist or nurse in charge.

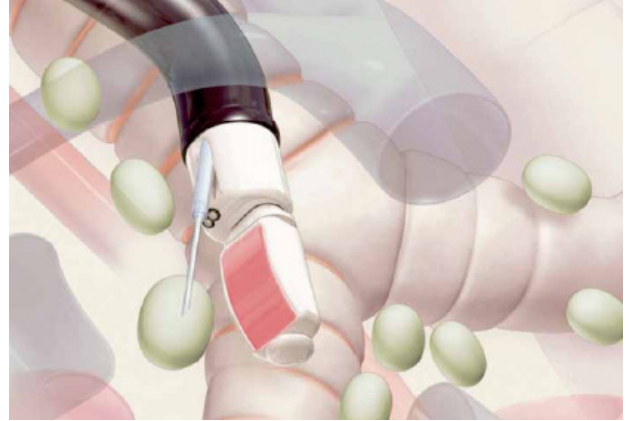
The time stated is your booking-in time; please tell those coming with you that this is **not** your procedure time. You should expect to be in the department for up to four hours for your procedure to take place and for you to recover adequately before you are discharged home. The test itself takes around an hour and may take longer if we need to carry out additional procedures. Emergencies have to take priority and very complex cases may take longer than usual. Delays for other patients therefore occasionally cannot be avoided.

The test itself is relatively pain free as there are no pain receptors in the airways: and this procedure should not interfere with your breathing.



## What is Endo Bronchial Ultrasound Scan?

Endo Bronchial Ultrasound Scan (EBUS) is a procedure used to find and sample lymph nodes lying just outside of your breathing tubes, using a thin flexible tube (endoscope) which has an ultrasound probe at its tip. Samples can then be taken from the lymph node by passing a small needle into them (see image). This allows direct sampling of the lymph nodes which can become enlarged as a result of infection, inflammation, or cancer. The results of the samples taken may therefore provide valuable extra evidence about chest disease.



**Needle aspiration of a lymph node**

Lymph nodes are small glands found throughout the body. They form the lymphatic system, important for the working of your immune system.

## What do I do before coming into hospital?

Please contact the Endoscopy Unit as soon as possible for advice if any of the following apply to you.

- You have diabetes
- You might be pregnant
- You are taking warfarin, clopidogrel, or other blood thinning medications
- You have a pacemaker
- You have suffered a heart attack within the last six weeks
- You have any queries about your medication or other health issues.

## Please do the following to prepare for EBUS.

- On the day of your procedure please do not eat or drink for four hours before your appointment.
- If you take heart or blood pressure medication and you take this in the morning, please still take this with a little sip of water when you first wake up.
- Please arrange for someone to drop you off and pick you up from the Endoscopy Unit and stay with you for 24 hours after your procedure.
- Bring any angina sprays or asthma inhalers with you.
- Please feel free to bring a book or something to occupy you but do not bring valuables into hospital. Please note that East Kent Hospitals accepts no responsibility for the loss or damage to personal property, unless the property had been handed in to Trust staff for safe-keeping.

## What will happen when I arrive at the hospital?

- Please report to the Endoscopy Unit reception.
- An endoscopy nurse will check your details, blood pressure, and pulse.
- If you are taking any medication or if you are allergic to anything (medications, plasters, latex) please tell the nurse.
- The endoscopists performing your test will explain the procedure to you, including the risks and the benefits of the procedure. You will then sign a consent form. This confirms that you understand the procedure and the risks involved and are happy to proceed. Remember you can withdraw your consent for treatment at any time.
- A small needle will be placed into a vein in your arm to give you medication (sedation and pain relief).
- A nurse will stay with you throughout your examination.

## What does the examination involve?

Some local anaesthetic will be sprayed to the back of your throat. This may taste a little unpleasant and may cause you to cough a little. You will be monitored during your procedure to check your oxygen levels, pulse, and blood pressure. Oxygen will be given through a small tube placed just inside your nostrils.

Once you are lying on the bed, you may be asked to remove any false teeth and glasses. Goggles will then be placed over your eyes for your protection. We will ask you to place a plastic mouth guard into your mouth and the endoscope will then be passed through the mouthpiece.

You will be offered a sedative through the small plastic needle in your arm to help you to relax and reduce coughing. More sedation is given during your procedure, if it is needed. Following the sedation many patients do not remember anything about their examination.

The endoscopists will insert the tip of the endoscope into your mouth and then gently guide it around the back of your throat into your trachea (windpipe). As the tube is passed into your windpipe it may feel slightly uncomfortable and more local anaesthetic spray is used to numb your voice box at this point. This may make you cough but this will soon settle as the anaesthetic spray takes effect.

Modern endoscopes transmit pictures through a camera attached to a TV monitor, for the consultant to look at.

## How long will it take?

The procedure usually takes about an hour. However, you should allow at least four hours for the whole appointment, to prepare, give time for the sedative to work, completion of the procedure, and for you to recover safely.

### **What will happen after my procedure?**

- You will return to the recovery area to rest.
- Your pulse and blood pressure will be monitored until you are fully recovered.
- Your throat may be sore once the local anaesthetic wears off, but this will soon pass.
- You will feel sleepy for a while but you will recover over a short period of time.
- You may cough up some bloodstained sputum; however this is nothing to worry about.
- You will be unable to eat or drink until you have been told by the nursing staff that it is safe to do so, this is usually one and a half hours after your procedure.
- The samples taken during your procedure usually take between five and seven days to process and report. Your results are discussed at a multi-disciplinary meeting and your consultant or a member of the medical team will advise you further by telephone or you will be sent an appointment to see your consultant in clinic to discuss your results.
- You may have a cough for a day or two after your procedure. This should clear on its own and is nothing to worry about.

### **What should I do when I leave the hospital?**

- You must have a friend or relative with transport collect you from the Unit and stay with you for 24 hours while you rest and until you are fully recovered.
- You must not drive, drink alcohol, use any sleeping medication, or operate machinery (such as a kettle, iron, or cooking appliances). You should not make any important decisions or sign important documents for 24 hours following your procedure.

### **When can I return to work?**

The sedation remains in your system for 24 hours. You may feel well the day after your procedure but the sedation may still affect your ability to work. We advise you to take the day off work following your procedure to allow you to rest and recover fully.

## Are there any risks?

EBUS is an extremely safe procedure, provided that some basic precautions are taken. You will be carefully assessed and monitored before, during, and after your procedure to minimise any clinical risks.

Complications are rarely serious but can include the following.

- Cough, sore throat, and hoarse voice.
- Bleeding or coughing up blood.
- Fever or infection can be introduced through your upper airway.
- Collapse of your lung (pneumothorax) or escape of air into the centre of your chest (pneumomediastinum); this usually stops on its own over time but sometimes may need observation in hospital, or insertion of a drain into your chest under local anaesthetic.
- Irregularities of your heart (arrhythmias).
- Sometimes the sedative may suppress your breathing. If this happens you may need medical help to help your breathing (ventilation).
- According to research, the risk of death is extremely low.

You will have an opportunity to ask any specific questions before your procedure. Please feel that you can ask these questions when you are being admitted by the nurse or at any other time during your visit.

## What do I do if I am feeling unwell at home after my procedure?

If at any time you feel unwell after your procedure, for example if you feel your heart racing, experience any chest pain, coughing up blood, or have any other concerns within 24 hours following your procedure, contact this department or go to the accident and emergency (A&E) department telling them that you have had an Endo Bronchial Ultrasound examination. Contact details for the Endoscopy Units and A&E are on the following page.

If there is anything you are unsure about, please do not hesitate to speak to the nurse caring for you before you leave the department.

## Any further questions?

Please phone the Endoscopy Unit. The Units are open Monday to Sunday 8am to 6pm.

- William Harvey Hospital, Ashford  
Telephone: 01233 61 62 74
- Kent and Canterbury Hospital, Canterbury  
Telephone: 01227 78 30 58
- Queen Elizabeth the Queen Mother (QEQM) Hospital, Margate  
Telephone: 01843 23 43 70

If you have any questions between 6pm and 8am Monday to Sunday then contact A&E on:

- A&E, William Harvey Hospital, Ashford  
Telephone: 01233 61 67 28
- A&E, Queen Elizabeth the Queen Mother Hospital, Margate  
Telephone: 01843 23 50 30

A short film outlining what patients can expect when coming to hospital for an endoscopy is available on the EKHUFT web site [www.ekhufft.nhs.uk/endoscopy/](http://www.ekhufft.nhs.uk/endoscopy/)

If you develop any severe pain in the neck, chest, or abdomen within the first 24 hours of your procedure please phone A&E (see telephone numbers above).

Our Units are regularly inspected and audited; please ask if you want any information about our performance standards. You can also visit [www.patientopinion.co.uk](http://www.patientopinion.co.uk)

### **This leaflet has been produced with and for patients**

If you would like this information in **another language, audio, Braille, Easy Read, or large print** please ask a member of staff. You can ask someone to contact us on your behalf.

**Any complaints, comments, concerns, or compliments** please speak to your doctor or nurse, or contact the Patient Advice and Liaison Service (PALS) on 01227 78 31 45, or email [ekh-tr.pals@nhs.net](mailto:ekh-tr.pals@nhs.net)

**Patients should not bring in large sums of money or valuables into hospital.** Please note that East Kent Hospitals accepts no responsibility for the loss or damage to personal property, unless the property had been handed in to Trust staff for safe-keeping.

**Further patient leaflets** are available via the East Kent Hospitals web site [www.ekhufft.nhs.uk/patientinformation](http://www.ekhufft.nhs.uk/patientinformation)