



Information for  
patients and  
carers

## Having an Endobronchial Ultrasound (EBUS)

Patient's Name: \_\_\_\_\_

Your appointment is at: Royal Preston Hospital  
(01772 522412)

Location: Endoscopy Unit / Day Case Unit

Date of procedure: \_\_\_\_\_

Time of procedure: \_\_\_\_\_

## Endobronchial Ultrasound (EBUS)

This leaflet has been produced to answer questions you may have about the Endobronchial Ultrasound procedure and what to expect during your visit. If you have any other questions, please ask a member of the nursing team.

### What is EBUS?

The procedure is similar to bronchoscopy; it allows us to look directly at the larynx, trachea & bronchi. You may have had a bronchoscopy before; this procedure does not feel any different but takes a few minutes longer. The test allows the doctor to look into the glands and shadows in the deeper parts of your chest with the aid of ultrasound.

This is a small flexible tube that has both a camera and an ultrasound that enables direct visualisation of these otherwise inaccessible areas. These glands are outside or in deeper areas of your normal breathing tubes (trachea and bronchi). This is normally preceded by a camera test called bronchoscopy.

## Why do I need an EBUS?

The examination allows doctors to collect samples from the deeper parts of the chest to help explain different symptoms (coughing up blood, weight loss and cough) and shadows on the lungs. Specimens are collected through a needle and then sent to the laboratory. It takes a few days to process these samples.

## Will I find the procedure uncomfortable?

You may find the procedure unpleasant, as it may make you cough. However, we will give you sedation to minimise the discomfort. A trained nurse will remain with you throughout and will reassure you and explain what is happening during each stage of the procedure.

Sedation will be injected into your vein through a cannula. The sedation will make you feel drowsy and relaxed, but will not make you unconscious. You will be aware of your surroundings and will still be able to hear what is said to you and will be able to follow simple instructions during the procedure.

Sedation makes it unlikely that you will remember anything about the procedure. When the procedure has ended, you will be taken to the recovery area for about an hour.

## What are the risks of having an EBUS?

EBUS is normally a very safe procedure but can result in complications such as a reaction to the sedation medication; this is usually managed with close monitoring and rarely with the use of medicines to reverse the effect of sedation. Another rare complication is bleeding after a needle aspiration (1 in every 500). This usually stops on its own but may need medication injected through the EBUS tube or treatment with diathermy (using heat to seal the area).

Rarely (1 in every 500) the procedure may cause an air leak. This is

managed by observation but may require a tube inserted in your chest which helps the lung re expand. You would need to stay in hospital for a short period of time.

A more common complication after bronchoscopy is developing a fever. This does not always mean that you have an infection and will usually settle within 24 hours of your procedure. Simple measures such as paracetamol may help if needed.

A trained nurse will monitor you at all times to ensure that any problems are quickly recognised and treated.

## What are the alternatives to having an EBUS?

In some cases and depending on individual circumstances, a surgical procedure called a mediastinoscopy (looking into the center of the chest through a small wound in the neck) under general anaesthesia is performed in an operating theatre. This requires referral to a different Hospital. This is not possible for everyone.

## What do I need to do before I have an EBUS?

- To make sure that your stomach is empty it is important NOT to eat 6 hours or drink for 2 hours before the test
- If you are diabetic please read the enclosed leaflet
- **If you are taking any of these medications:** Warfarin, Rivaroxaban, Sinthron, Dabigatran, Edoxaban, Apixaban, Dipyridamole, Aspirin, Clopidogrel, Prasugrel, Ticagrelor, Dalteparin/Clexane injections **you may need to stop taking them, please ring 01772 522412 for further information**
- Bring an up to date list of medications and allergies
- Since you will have sedation you will need to arrange for someone to collect you from the Endoscopy or Day Case

- Theatre and stay with you for up to 24 hours
- Remove nail polish and false nails
  - Bring your consent form (read it but please do not sign it)
  - Do not bring valuables or jewellery into the department. We cannot be held responsible for any loss or damage
  - Please let us know in advance if an interpreter or sign guide would be needed on the day of the EBUS

## What happens when I arrive on the unit?

- When you arrive, please book in at reception
- You may have to wait before being called by one of the nurses
- The nurse will take you into a private booking in room to explain the procedure to you, complete the paperwork and you will have the opportunity to ask any questions
- You will be asked to sign the consent form that shows that you understand the test and the risks involve
- You will have a small cannula inserted into a vein in your hand or arm. The sedation will be given through this when you are in the treatment room
- You can wait in reception until the doctor is ready to carry out your procedure

## What happens during the procedure?

For your comfort and reassurance, a trained nurse will be with you throughout the procedure. Sedation will be given before the procedure starts (by an anaesthetist in Day Case Theatre).

When you enter the room the doctor will speak to you. You will be asked to sit with your feet up on the couch. Local anaesthetic will be sprayed

onto the back of your throat. A 'peg' will be placed on your finger to monitor your pulse and oxygen levels. The camera will be passed through your mouth. A guard will be placed in between your teeth (if you wear dentures these will first need to be removed). As the camera passes into your airways, more liquid local anaesthetic is sprayed through the camera to numb your voice box. The doctor can then examine the different parts of your airways.

## **What happens after the procedure?**

You will be taken to the recovery area until the effects of the sedation has diminished (about one hour). You should not eat or drink for about one hour after the throat spray has been given.

Please remember that it is important that someone comes to collect you from the department and stays with you for the next 24 hours. If this is not possible, please contact the reception staff before your appointment date and let us know.

When you arrive home it is advisable to recover quietly for the rest of the day. You will be able to eat and drink normally, but you must not drive, drink alcohol, operate machinery or sign legal documents for 24 hours.

## **Frequently Asked Questions**

### **How many people will be in the procedure room?**

The endoscopist along with one or two trained nurses and a healthcare assistant will be in the room. There are often extra doctors or nurses in the room who are there to learn. If you are unhappy with this, then please inform the nurse. In Day Case Unit, an anaesthetist will also be present.

## How long will I be in the unit?

You can expect to be on the unit for between 2–4 hours of your appointment time. The procedure can take from 30-45 minutes. You will be in recovery for up to 60 minutes after the procedure.

## What samples may be taken?

Taking samples is usually painless. Short descriptions of the different types of samples that may be taken are listed below:

**Lavage:** fluid is flushed through the camera into the airways then collected in a pot

**Brush:** a very small brush is passed through the camera and brushes the wall of the airways to collect cells

**Biopsy:** a very small pair of forceps is used to take a small sample of tissue

**Transbronchial needle biopsy** a fine needle is passed through the wall of the airway using ultrasound waves to guide it and tissue is aspirated from structures in the centre of your chest.

When samples are taken for examination, these are sent to the Pathology laboratory to identify the cells that are in the tissue sample. The results will be sent to your consultant and they will be in contact with you to let you know the results. Results can take any time from 1 to 2 weeks.

## Checklist

- Please phone 01772 522412 to confirm your appointment
- Do not eat anything 6 hours prior to the test
- Only drink water on the day of the test. Do not drink anything for 2 hours before the test
- Please bring a list of all medications that you are taking
- Arrange for someone to accompany you and stay with you for up to 24 hours
- Bring the consent form, but do not sign it
- Write down any questions/concern
- Contact the Bronchoscopy secretary on 01772 522412 if an interpreter is needed

## Contact details

Should you require further advice or information please contact the Endoscopy unit on 01772 522032.

## Sources of further information

[www.lancsteachinghospitals.nhs.uk](http://www.lancsteachinghospitals.nhs.uk)

[www.nhs.uk](http://www.nhs.uk)

[www.patient.co.uk](http://www.patient.co.uk)

[www.accessable.co.uk](http://www.accessable.co.uk)

[www.brit-thoracic.org.uk](http://www.brit-thoracic.org.uk)



All our patient information leaflets are available on our website for patients to access and download:

[www.lancsteachinghospitals.nhs.uk/patient-information-leaflets](http://www.lancsteachinghospitals.nhs.uk/patient-information-leaflets)

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If you want to stop smoking you can also contact the Quit Squad Freephone 0800 328 6297.

Please ask if you would like help in understanding this information. This information can be made available in large print and in other languages.

**Gujarati:**

આ માહિતીને સમજવામાં સહાયતા જોઈતી હોય તો કૃપા કરીને પૂછો. આ માહિતી મોટા છપાણમાં અને અન્ય ભાષામાં ઉપલબ્ધ કરી શકાય છે.

**Romanian:**

Vă rugăm să întrebați dacă aveți nevoie de ajutor pentru înțelegerea acestor informații. Aceste informații pot fi puse la dispoziție în format mare și în alte limbi.”

**Polish:**

Poinformuj nas, jeśli potrzebna jest ci pomoc w zrozumieniu tych informacji. Informacje te można również udostępnić dużym drukiem oraz w innych językach

**Punjabi:**

ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਸਮਝਣ ਵੱਲੋਂ ਮਦਦ ਲੈਣੀ ਚਾਹੋਗੇ ਤਾਂ ਕਰਿਯਾ ਕਰਕੇ ਇਸ ਬਾਰੇ ਪੁੱਛੋ। ਇਹ ਜਾਣਕਾਰੀ ਵੱਡੇ ਪ੍ਰਿੰਟ ਅਤੇ ਹੋਰਨਾਂ ਭਾਸ਼ਾਵਾਂ ਵੱਲੋਂ ਮੁਹੱਈਆ ਕੀਤੀ ਜਾ ਸਕਦੀ ਹੈ।

**Urdu:**

دو سر ی زبانوں او ر بڑی اگر آپ کو ہی معلومات سمجھنے کے یغل مدد ی ضرورت ہے تو ییچھپیا یں ییہ ابیلست ہو یسکت ہے برا ئ مہر یبان پو یچھدی۔ معلومات

**Arabic:**

مطبوعة بأحرف كبيرة و بلغات إذا كنت تريد مساعدة في فهم هذه لمعلومات يُرجى أن تطلب آخرى يمكن تو فسير هذه المعلومات

**Department:** Endoscopy

**Division:** Medicine

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