

Patient information

Endobronchial Ultrasound Guided Bronchoscopy (EBUS)

Respiratory Department

This booklet will answer many of your questions about your bronchoscopy, please read this booklet carefully. However, if you would like to speak to somebody about the procedure, please contact the Endoscopy Unit on the number shown above.

Your name:.....

NHS No:.....

Your appointment is on.....

At

Checklist of items to bring with you:

- List of current medication.
- Details and contact number for the person who will be collecting you and escorting you home.

General points to remember

- It is our aim for you to be seen and investigated as soon as possible after your arrival. However, the Endoscopy Unit is very busy, and your investigation may be delayed. If emergencies occur, these patients will be given priority.
- The hospital cannot accept any responsibility for the loss or damage to personal property during your time on these premises.
- If you are unable to keep your appointment please notify the Endoscopy Unit as soon as possible on the following number: 0151 529 0604

Do not eat or drink for six hours before the appointment.

What is an EBUS Bronchoscopy?

You have been advised by your hospital doctor to have a procedure known as an Endobronchial Ultrasound (EBUS) bronchoscopy.

- An EBUS bronchoscopy procedure is an examination to look for any problems involving the lymphatic glands lying between the air passages of your lungs, in the middle of the chest, around the heart and between the major blood vessels.
- Certain conditions may cause these lymph glands to become enlarged. The purpose of the EBUS bronchoscope is to inspect and take a sample of the enlarged lymph glands using a flexible tube called a bronchoscope.

- The bronchoscopy will be performed by or under the supervision of a lung specialist (Consultant).
- A flexible tube (bronchoscope) is passed through the mouth into your air passages, and this allows the doctor to visualise your air passages.
- There is plenty of room to breathe around the bronchoscope.
- The bronchoscope also has a small ultrasound probe at the end of it which allows the doctor to be able to see beyond the air passages and inspect any lymph glands lying between your air passages and lung which may need to be sampled.
- By seeing these enlarged glands by means of ultrasound, the doctor performing the EBUS procedure will be able to obtain a specimen by means of inserting a needle through the wall of the air passages.
- This should not be painful, and patients do not often remember this being done because of the sedation.
- The specimens will be sent to the hospital laboratory for analysis / examination.
- The whole EBUS bronchoscopy procedure takes about 40 minutes to perform.

As you will have been given some sedation for the procedure, you may remember very little about it.

What would be the alternatives be to an EBUS bronchoscopy?

- Before EBUS bronchoscopy was available, sampling these enlarged lymph glands required a general anaesthetic and an operation which carried greater risks and also resulted in an overnight hospital stay.
- EBUS bronchoscopy however does not need a general anaesthetic or surgery and can, in most cases, be performed as a “day case” procedure meaning that you will be able to return home after a few hours on the same day.

Depending on your scan results, a biopsy could be taken from another part of your body.

Your doctor can discuss whether this is an option for you, and why they have recommended EBUS bronchoscopy

What are the benefits of a EBUS bronchoscopy?

Your lung specialist has recommended a EBUS bronchoscopy because it is felt that the benefit to you of having this test outweighs any risk.

The benefit to you will be in obtaining a diagnosis of your chest problem so the correct treatment can be offered. In cases where nothing abnormal is found, we can reassure you of this.

The decision to offer you a EBUS bronchoscopy is taken carefully and with your best interests in mind.

What are the potential risks of having a EBUS bronchoscopy?

As with all medical procedures there are some risks involved with a EBUS bronchoscopy although these are rare.

The person who has requested the test will have considered these risks and compared them to the benefit of having the procedure carried out.

The health care team will try to make your procedure as safe as possible however, complications can happen. Some of these can be serious and can even cause death (Risk: Approximately 1 in 4,000)

Possible complications of a EBUS bronchoscopy are listed below. Your doctor may be able to tell you if the risk of a complication is higher or lower for you.

Breathlessness: Sometimes breathing can be more difficult because of sedation or inhaling saliva. Your oxygen levels will be monitored, and you will be offered oxygen if needed. Breathlessness quickly settles after the EBUS bronchoscopy.

Shallow breathing and low oxygen levels: The EBUS bronchoscopy procedure usually involves giving patients sedative medications into a vein before passing the bronchoscope through the mouth.

- The amount of sedation given will depend on your lung capacity, any history of heart or kidney problems and your overall general health.
- A possible side effect of such sedative medications is to make the breathing shallow and slower which may result in a lowering of oxygen levels during and immediately after the procedure.
- However, all patients undergoing EBUS bronchoscopy have their breathing, oxygen levels and heart rate monitored throughout the procedure and are also given additional oxygen if needed.

Bleeding: May occur from where the doctor has taken a biopsy. It is usually minor and stops on its own. It is normal to cough up streaks of blood for a day or two after the EBUS bronchoscopy. Before undergoing the EBUS bronchoscopy procedure, please inform your clinic doctor and the bronchoscopy nurse if you are taking warfarin, clopidogrel or any other blood-thinning drugs. These will usually need to be stopped before your test.

High Temperature: May develop a short while after the EBUS bronchoscopy. This can happen due to your body responding to the telescope and drugs used during the bronchoscopy. High temperature is easily treated with paracetamol.

Sore throat, husky voice or worsening of a cough: These may develop following the EBUS bronchoscopy and are caused by the bronchoscope rubbing the delicate lining of your throat and airways. These symptoms should disappear within 48 hours.

Tooth Damage: There is a small risk of tooth damage. Please inform your doctor or nurse before you leave the department if you think this has happened.

Infection: There is a small risk of infection. See your GP straight away if your phlegm (sputum) changes colour or you start feeling more breathless. A temperature the night after the test is normal, however if you feel your temperature is high for longer than this, contact your doctor.

Heart Rhythm problems: There is a small risk of heart rhythm problems during a EBUS bronchoscopy. Your heart will be monitored throughout the EBUS bronchoscopy procedure so that any change in heart rhythm is picked up and can be treated.

Air leak (pneumothorax): Very occasionally the biopsy can cause a small air leak from a lung.

Patients who suffer this complication may feel markedly more breathless and may have low oxygen levels following the EBUS bronchoscopy procedure. You may need to have an x-ray after the biopsy to check for this and an air leak may need further treatment.

Allergic reaction: You may be allergic to the equipment, materials or sedative used for a EBUS bronchoscopy. Please inform your doctor if you have any allergies or if you have reacted to any drugs or tests in the past.

You should discuss these possible complications with your doctor if there is anything you don't understand.

Non diagnosis: There is a risk that the EBUS bronchoscopy does not provide adequate information to provide a diagnosis. This means we may need to offer you a further test.

Preparing for your EBUS bronchoscopy

Eating and drinking

Do not eat or drink for six hours before the appointment.

If your appointment is in the afternoon, you may have a light breakfast (small bowl of cereal or slice of toast) before 9am and small amounts of water until two hours before your appointment.

Medications

You can take your morning medicines with a few sips of water.

If you are a patient with diabetes, make sure you tell the doctor who recommended the bronchoscopy or your clinical nurse specialist / keyworker before the day of your test.

They will ask you which treatment you take for your diabetes, and they will tell you whether to take your diabetes medication on the day of the EBUS bronchoscopy.

Before undergoing the bronchoscopy, please inform your clinic doctor at the outset and the bronchoscopy nurse when you attend for the procedure if you are taking **warfarin, clopidogrel** or any **other blood-thinning drugs**. These will usually need to be stopped before your bronchoscopy.

What to bring with you

Bring slippers, dressing gown, book or magazine and all your tablets and medicines. Please remember that your appointment time is not the time you will have the test - there will be a wait between your admission and having the EBUS bronchoscopy done.

How long will I be in the Endoscopy Unit?

- You should expect to be on the unit for up to four hours, but this depends on how quickly you recover and how busy the unit is.
- Please note that the unit also looks after emergencies and these can take priority over our outpatient lists

What will happen when I arrive?

When you arrive at the Elective Care Centre, please go to the Endoscopy reception on the third floor and give your name to the receptionist who will check that your personal details and current GP are correct.

- To protect the privacy and dignity of our patients, your escort will then be asked to leave and to collect you later from the Endoscopy Unit when you are ready to leave.
- You will be asked to wait until you are called by a qualified nurse or health care assistant. They will ask you a few questions, one of which concerns your arrangements for getting home.
- If you are having sedation, you must not drive or travel home alone, and the nurse will need to make a note of your escort's phone number to call when you are ready to leave. They will discuss the EBUS bronchoscopy with you and answer any other questions you may have.
- A small cannula (small plastic tube) will be inserted into a vein in the back of your hand through which the sedation and any necessary medications will be given later. You will have your blood pressure, pulse, breathing rate and oxygen levels taken. If you have diabetes, you will have your blood glucose level checked and if you are taking warfarin, you will have your clotting level checked.
- You will then be asked to wait in the Endoscopy reception area until you are called by a qualified nurse or a health care assistant.
- In turn you will be escorted into the theatre where the lung specialist performing the bronchoscopy, and the nurses will introduce themselves. You will have the opportunity to ask any final questions before the bronchoscopy.
- The nurse looking after you will make you comfortable in either a sitting or lying position.
- You will be given oxygen during the procedure via small prongs in the nostrils and we will monitor your breathing and heart rate so changes will be noted and dealt with accordingly.

For this reason, you will be connected to a finger probe to measure your oxygen levels and heart rate during the procedure. Your blood pressure may also be recorded.

The EBUS bronchoscopy procedure

The lung specialist will spray your throat, voice box and airways with local anaesthetic to numb them first and may give you a mild sedative through the cannula in the back of your hand which will make you feel drowsy and relaxed.

The EBUS bronchoscopy involves passing a telescope (bronchoscope) through your nose or mouth.

There is plenty of room to breathe around the telescope. The airways of both lungs will be examined.

The airways and lymph nodes will be examined. Small biopsies from the lymph nodes or abnormal airways may be taken.

The whole procedure lasts around 40 minutes. You are normally awake during the procedure but if you have been given a sedative you may remember very little about it.

What will happen after the procedure?

After the EBUS bronchoscopy you will be transferred to the recovery area where you will be allowed to rest for as long as is necessary. Your blood pressure and heart rate will be recorded and, if you have diabetes, your blood glucose will be monitored.

If you have underlying breathing difficulties or if your oxygen levels were low during the procedure, we will continue to monitor your breathing.

As you have had sedation, you will be required to stay for at approximately two hours from the time the sedation was administered. You should not eat or drink until the sensation in your mouth and throat has returned to normal. This usually takes approximately 1 hour since you have had sedation.

If you have sedation, you will require an escort home and to be with somebody for the following 24 hour.

The nursing staff will telephone the person collecting you when you are ready for discharge. Your escort will be able to collect you from the Endoscopy Unit on the third floor of the Elective Care Centre (ECC).

If you had sedation, you should not: drive a car or ride a bicycle, drink alcohol, operate machinery, or do things requiring skill or judgement, make important decisions or sign documents for 24 hours after your bronchoscopy.

How will I find out the results of the EBUC Bronchoscopy?

Before you leave the Endoscopy Unit, a member of the healthcare team will confirm that you have a clinic appointment arranged to discuss with you the results of the bronchoscopy and any treatment that you need.

Initial results from the specimens taken at bronchoscopy will be available in approximately ten-fourteen days so it is important that you keep your clinic appointment. You should be able to return to work the day after the EBUS bronchoscopy unless you are told otherwise.

Important

If you have severe chest pain, continued vomiting, a high temperature lasting more than 12 hours, sudden breathlessness or you cough up more than a tablespoon of blood, you must go immediately to the Accident and Emergency department and tell them you have had a EBUS bronchoscopy.

Car Parking

The Trust's five-floor, multi-storey car park has space for 1,250 vehicles including 50 disabled parking spaces. This car park is located at the rear of the hospital, in front of the Elective Care Centre and is connected by a link bridge.

This is the ideal location to access the Endoscopy Unit which is situated on the 3rd Floor of the Elective Care Centre.

There is a charge for car parking at Aintree Hospital. For further information on the charges please see the Aintree Hospital website.

Feedback

Your feedback is important to us and helps us influence care in the future.

Following your discharge from hospital or attendance at your outpatient appointment you will receive a text asking if you would recommend our service to others. Please take the time to text back, you will not be charged for the text and can opt out at any point. Your co-operation is greatly appreciated.

Further information

If you need any further information, please contact the Endoscopy Unit or Customer Service

Aintree University Hospital

Endoscopy Unit Tel: 0151 529 0604

Customer Service Tel:0151 529 3287

Author: Respiratory Department

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All Trust approved information is available on request in alternative formats, including other languages, easy read, large print, audio, Braille, moon and electronically.

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