Having an Endobronchial Ultrasound (EBUS) and lymph node sampling procedure

What is an EBUS?
An EBUS is a procedure which allows the doctor to view the airways inside your lungs. A small flexible camera fitted with ultrasound is carefully passed through your mouth into your lung. The doctor will use an ultrasound scanner to look at the glands (lymph nodes) in the area and may take samples using a needle. Most patients have an injection called “conscious sedation” which aims to relax them and make them drowsy. Local anaesthetic is used topically to make the procedure more comfortable.

Why do I need an EBUS and what are the benefits?
An EBUS will enable the doctor to take tissue samples to confirm a diagnosis and determine an appropriate plan of treatment as necessary. The preliminary results from tissue samples are usually available in 7 days, but sometimes further tests may need to be done on the samples and this can take longer.

What are the alternatives?
Your doctor has advised you to have an EBUS as s/he feels that this is the best option for you. You can however discuss alternatives that may be available to you, including the option not to have this procedure done.

X-rays, scans and breathing tests give your doctors different information about your lungs. These cannot provide samples of lung tissue.

What are the potential risks and side effects?
An EBUS is an extremely safe procedure. The chance of anything going seriously wrong is very small indeed. Most problems that do occur are minor and can be dealt with easily.

Potential problems from having an EBUS are:
• Coughing - this almost always settles once the local anaesthetic has worked.
• Bleeding from where the samples have been taken.
• Very occasionally patients may experience some temporary breathlessness due to irritation of the voice box.
• A few patients react to the drugs used for sedation / local anaesthetic. The risk is very small and can usually be reversed with medication.
• Occasionally the flexible camera can cause spasm of the airways leading to difficulty in breathing.

You should have had sufficient explanation before you sign the consent form. Your signature confirms that you understand the procedure, the potential risks and side effects and want to go ahead with the procedure.
Although you will sign a consent form for this treatment, you can withdraw your consent if you change your mind after signing.

What is conscious sedation?
The conscious sedation is an injection that aims to make the procedure more tolerable for you by causing you to feel relaxed and drowsy, people who choose to have it find they often cannot remember the procedure clearly afterwards. Conscious sedation is not like having a general anaesthetic, as you will still be able to hear and understand what is being said to you. You can have an EBUS without sedation if you prefer.

If you wish to have conscious sedation for this procedure please arrange for someone to collect you from the department as you will not be able to drive for 24 hours after the conscious sedation and will be unable to drive yourself home. Someone should stay with you for 12 hours after the procedure.

How long does the procedure take and how long will I be in the Endoscopy Unit?
An EBUS procedure usually takes approximately 45 minutes, but this will vary depending on the findings and if treatment is needed. Including time to prepare you for the procedure and recovery time, you should expect to be in the department for between two and four hours.

What should I do before I come into hospital?
For this procedure it is important that your stomach is empty. The night before your EBUS, do not eat anything after midnight. You can have a drink of water, or black tea or black coffee up to two hours before your visit to the hospital but you must not eat any breakfast or drinks containing milk.

- You may take your usual medication (except diabetic and blood thinning medication) as normal. You can take the medication with a small amount of water or bring it with you and take it after the test if required.
- *If you are diabetic or are taking anti blood thinning medication your consultant will discuss your management of this with you prior to the procedure.
- If you have asthma and take inhalers (e.g. salbutamol) please take them as normal in the morning, and bring them with you.

What do I need to bring with me?
Please wear loose, comfortable clothing. Bring:
- A list of all your medications.
- A list of all your allergies.
- A name and telephone number of the person taking you home.
- Your reading glasses.
Please do not bring any valuables with you, as we cannot take responsibility for any losses.

What will happen when I arrive at the Endoscopy Unit?
- You will be greeted by a member of the endoscopy team at the endoscopy reception and your details will be checked.
- A trained nurse will review your medical history, medications and any allergies. Your blood pressure, pulse and oxygen saturations will be taken.
- The nurse will explain the procedure to you again and you can ask questions if you need to.
• If you haven’t already signed a consent form, you will be asked to complete one now. This is to confirm that you understand the test and want to go ahead with it.
• We will place a small cannula into a vein in your hand or arm, so that we can give you any medication that may be required for the procedure.
• The nurse or doctor will give you local anaesthetic spray or gel to numb your nose and also your mouth and throat.
• Very occasionally the doctor may recommend additional medication before the test (for example a nebulised bronchodilator for patients with severe COPD.) If so, the doctor will discuss the medication with you.

What happens during an EBUS?
• You will lie on a hospital trolley. Most doctors prefer to do the test with you lying down.
• Three nurses will assist the doctor and look after you during the examination.
• You will be closely monitored during the test and you may be given oxygen.
• If you have chosen to have sedation, we will give this to you before the test starts.
• The bronchoscope (a flexible tube connected to a camera) is carefully passed through the mouth into the breathing tubes in your lung.
• The doctor will use more local anaesthetic spray during the test to numb the vocal cords and windpipe. This will make the test more comfortable for you although it won’t stop you from coughing at times.
• The doctor will look at the lining of the airways and use ultrasound to identify lymph nodes which lie next to the airways in the lungs and take some small tissue samples if necessary.

What happens after the EBUS procedure?
• After the procedure you will be taken to the recovery area for approximately one to two hours whilst the sedation wears off. The nurses will monitor your blood pressure, pulse and oxygen levels regularly.
• When you are fully awake and the local anaesthetic has worn off you can have something to drink and a biscuit.

How will I feel afterwards?
Your throat may feel a bit hoarse or sore for a day or two afterwards. If you have had a biopsy, you will probably cough up a few specks of blood.

Most patients are able to go home one to two hours after the test. It’s a good idea to take it easy for the rest of the day.

What can I expect following conscious sedation?
The effects of sedation can last up to 24 hours.

• You will need a responsible adult (aged 18+) to collect you from the Endoscopy Unit and stay with you for at least 12 hours after your test.
• You must not drive a car/ motorbike, operate machinery (including using your cooker), drink alcohol.
• You should not look after any young children alone.
• You should not take sleeping tablets.
• You should not sign a legal document within 24 hours of having a sedative.
• We advise you to go home and rest.
• You can eat a light diet, drink as normal.
• You can take your usual medication.
• You should be able to resume normal activities 24 hours after the EBUS.

**Can I expect any problems when I get home?**

Serious side effects are rare, but if you develop any of the following symptoms, you need to be seen urgently by a medical professional:

• Painful or difficult breathing.
• Coughing up a lot of blood.

**When can I return to work?**

You should be able to resume normal activities the day after the EBUS, or sooner than that if you have decided not to have sedation.

**Specific Advice and Contact details**

You will be given an additional supplementary leaflet advising you of specific instructions relevant to you. This will include advice particularly if you are diabetic or taking anticoagulants (i.e. Warfarin, clopidogrel). Please telephone the Consultant Secretary or the Endoscopy Unit and speak to a member of staff if you are unclear or need further guidance.

**Endoscopy Unit Conquest Hospital** – Tel: 0300 131 5297  
**Endoscopy Unit Eastbourne District General Hospital** – Tel: 0300 131 4595

Consultant Secretary Conquest Hospital:  
Tel: 01424 758191 – Monday to Friday - 8.30am to 4.30pm

Consultant Secretary Eastbourne District General Hospital:  
Tel: (01323) 413718 or (01323) 413784 – Monday to Friday - 8.30am to 4.30pm

**Important information**

The information in this leaflet is for guidance purposes only and is not provided to replace professional clinical advice from a qualified practitioner.

**Your comments**

We are always interested to hear your views about our leaflets. If you have any comments, please contact the Patient Experience Team – Tel: 0300 131 4731 or by email at: esh-tr.patientexperience@nhs.net

**Hand hygiene**

The Trust is committed to maintaining a clean, safe environment. Hand hygiene is very important in controlling infection. Alcohol gel is widely available at the patient bedside for staff use and at the entrance of each clinical area for visitors to clean their hands before and after entering.

**Other formats**

If you require any of the Trust leaflets in alternative formats, such as large print or alternative languages, please contact the Equality and Human Rights Department.

Tel: 0300 131 4500 Email: esh-tr.AccessibleInformation@nhs.net
After reading this information are there any questions you would like to ask? Please list below and ask your nurse or doctor.

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Reference
The following clinicians have been consulted and agreed this patient information:

Dr Osei Kankam, Consultant Respiratory Physician
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Dr James Wilkinson, Consultant Respiratory Physician
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The Clinical Specialty/Unit that have agreed this patient information leaflet:
Medicine Division

Next review date: November 2023
Responsible clinician/author: Mrs Nicola Booth, Clinical Service Manager, Medicine Division

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