



Endobronchial Ultrasound (EBUS)

You have been advised to have a test called an endobronchial ultrasound which is a specialised form of test using an ultrasound probe attached to a small camera called a bronchoscope to see into the lungs. This allows the doctor to examine the tissue around the centre of lungs. It is commonly used to take small biopsies from the lymph glands deep within the chest.

You may have already had a standard bronchoscopy camera test and EBUS is very similar but takes a little longer.

Why do I need this test?

Your hospital consultant has requested this examination to obtain further information before a treatment plan can be recommended.

Are there any alternatives to this test?

An alternative way to take biopsies from the centre of the chest is to have a surgical operation under a general anaesthetic. This is usually done by making an incision (cut) at the bottom of the neck and may involve an overnight stay in hospital. The risk of complications following this procedure is slightly higher than with endobronchial ultrasound.

What preparation will I need?

You should not consume any food or fluids for 4 hours before the procedure. Please do not smoke on the day of the procedure as this can make coughing worse.

What happens during the test?

You will be made comfortable on a couch. A small needle will be placed in your one of the veins in your arm. This is less painful than a nettle sting. The doctors recommend you have sedative injections to make you sleepy for this test when it is safe to do so. This allows the doctors to get better pictures and biopsies. Receiving sedation means you will need a responsible adult to take you home and stay with you for 24 hours after the procedure.

The sedation will help you feel relaxed, calm and sleepy. This is not a general anaesthetic therefore you will not be 'knocked out'. You will be given local anaesthetic to make the mouth, throat and breathing tubes completely insensitive to pain. You will notice that the anaesthetic sprayed into your throat has an unpleasant taste, this will disappear very quickly as it numbs the taste buds.

When the anaesthetic has numbed your mouth and throat, you will be asked to lie flat. A flexible camera is then passed through the mouth. Once the camera is in the throat, a small amount of local anaesthetic is sprayed through the camera in order to numb the voice box. This is similar to a sip of water going down the wrong way and will cause you to cough, however, this will settle very quickly, and the numbing effect of the anaesthetic will remove this sensation.

The camera will then be passed into the main breathing tubes and more anaesthetic liquid is sprayed to numb the airways. Your doctor will then use the ultrasound to guide the camera to the

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area where the biopsy needs to be taken from. You will not feel any pain during the biopsy. At this stage the lower parts of the lungs are also numb.

Are there any risks or complications involved?

This is a safe procedure, but like all medical tests or operations, there are some risks involved. Serious complications are very unusual. The national statistic is approximately 1 in 1,000.

Reported serious complications include the possibility of:

- Significant bleeding
- A chest infection
- A collapse of one of the lungs
- The procedure being complicated by the need to move to intensive care and life support (ventilation)

The risk of death during or immediately after an EBUS is reported nationally to be approximately 1 in 100,000.

Aftercare advice

As you have had a local anaesthetic sprayed onto the back of your throat, you will not be able to eat or drink for 2 hours following the procedure until the anaesthetic has worn off.

Following sedation, you will not be able to drive or operate machinery until the next day therefore you will need someone to take you home and remain with you for 24 hours after the procedure. You may cough up small amounts of blood in your sputum for 24 to 48 hours following the procedure. This is quite normal and should settle down.

The results of any biopsies usually take a week and will be sent back to your referring consultant. Endobronchial ultrasound generally provides a diagnosis in 8 to 9 times out of every 10 times it is performed. If the biopsy does not provide a diagnosis, your consultant may refer you for an operation on the chest.

Respiratory Medicine

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Contact numbers
Booking Team: **0121 371 3846** (For alteration of appointments)

Endoscopy Unit: **0121 371 3838** (For medication queries)

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