



**Northumbria Healthcare**  
NHS Foundation Trust

# **Bronchoscopy and Endobronchial Ultrasound (EBUS)**

Issued by Respiratory Medicine



Your appointment is on:

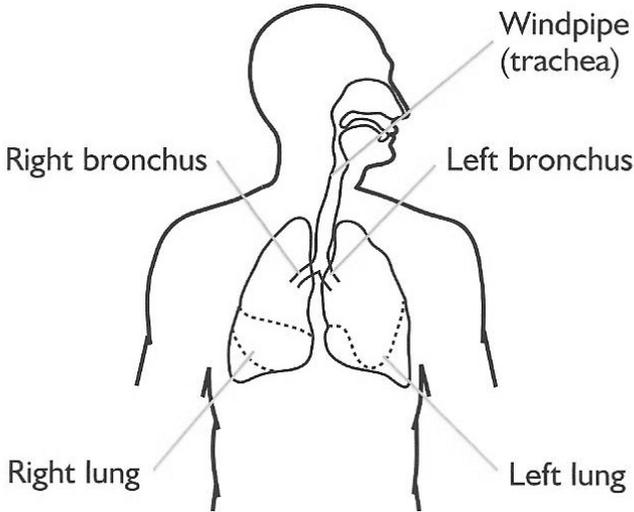
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# What is a bronchoscopy?

A bronchoscopy is a test which allows the doctor to look into your windpipe (trachea) and the air tubes of your lungs (right and left bronchus).



The doctor uses a thin, flexible tube called a bronchoscope. It is passed through the nose or mouth and down into the airways.

## The benefits are:

It allows the doctor to:

- see your windpipe (trachea) and airways (right and left bronchus)
- look for abnormalities
- take photographs
- take samples of lung tissue (called biopsies and brushings), which can then be examined under a microscope
- take a sample of secretions (called washings)

## **The alternatives to this test are:**

There are a number of other ways in which we can obtain a sample of tissue to look at under the microscope, for example a fine needle biopsy or a surgical biopsy but bronchoscopy is one of the simplest and safest ways of doing this.

## **Do I need to do anything before my appointment?**

Before the test: You must not have anything to eat for at least 4 hours.

You can drink clear fluids (such as water) until 2 hours before your appointment time.

## **What about taking my tablets?**

If you take regular medication, take your tablets as normal with a small amount of water, if required.

If you receive treatment for diabetes, or take blood thinning medication (Clopidogrel, Rivaroxiban, Warfarin, Dabigatran, Edoxaban, Apixiban, Ticagrelor, Prasugrel), your consultant will tell you how to prepare for the test.

## **What will happen before and during the test?**

Before your test the doctor will talk to you and ask you to sign a consent form, giving your permission for the test. If you have any questions please ask before signing the form.

You do not need a general anaesthetic for this test, but your doctor may give you a mild sedative injection. You will have a local anaesthetic to your nose (or mouth) and throat. This is usually given as a nasal or throat spray. It will make your throat feel numb and may taste bitter.

The doctor can then pass the thin tube through your nose or mouth into the back of your throat. Further local anaesthetic can

be sprayed into the voice box, through the tube, before it passes into your windpipe. This is not painful but you may cough.

You may experience a choking sensation but there is plenty of room for oxygen to reach the lungs around the tube, and extra oxygen will be given to you through a thin tube in your nostril. We will monitor how much oxygen you are taking in during the test using a clip on your finger.

If the doctor needs to take any samples this can be done easily and painlessly.

**The test usually takes 10-20 minutes.**

### **What will happen after the test?**

Because your throat has been numbed, it is important that you do not eat or drink anything until the anaesthetic has time to wear off. This usually takes 2-3 hours.

You will need to stay in hospital until your nurse is sure you are fit enough to go home.

When you get home, rest for the remainder of the day. You should be able to go back to work the next morning.

Do not drive or operate machinery until the day after your test.

### **If you had a sedative injection before your test, there are some extra precautions to take:**

- You will need to stay in hospital overnight unless a responsible adult can stay with you at home. The sedative will stay in your system for a few hours and you should not drive for 24 hours
- Do not operate machinery or drink alcohol for 24 hours

- Do not make important decisions (for example signing legal documents or other papers) for 24 hours
- If you live alone, you may like to ask someone to stay the night with you. Alternatively, we may suggest that you stay in hospital overnight.

### **Does the test have any after effects?**

You may have a slight nose bleed after the test or you may notice some blood in your phlegm. This is normal and it will usually settle within 24 hours.

Your throat may be a little sore and you may have a hoarse voice. This should ease within a day or two.

If you have any problems after the test please follow the instructions given to you before you leave hospital.

### **Are there any risks in having a bronchoscopy?**

Like all medical procedures, there are some small risks from having a bronchoscopy. Minor side effects include fever and coughing blood in your phlegm and can be quite common. Serious side-effects are extremely rare and occur in less than 1 person in 1000 people.

## **Endobronchial Ultrasound (EBUS)**

The EBUS test is very similar to a bronchoscopy, the main differences are that the telescope used for EBUS has an ultrasound probe at the tip. This allows us to find any abnormal lymph glands that sit next to the airway tubes. We can then pass a fine needle down the telescope to take samples of the glands. For EBUS the telescope is always passed through the mouth, not the nose. The test also takes a little longer than a 'standard' bronchoscopy (about 30 minutes) so we tend to use more sedation.

Once the tube is inside the windpipe we can use the scanner to find the lymph glands. We can take samples from these glands through the scope. We can also take some washing samples from the airways through the scope. This is not painful.

### **Are there any risks in having an endobronchial ultrasound?**

The risks from having an EBUS are much the same as for a bronchoscopy. Minor side effects include fever and coughing blood in your phlegm. Serious side effects are extremely rare and occur in less than 1 person in 1000 people.

Like all biopsy procedures there is a small risk of bleeding. However, this complication is rare as the ultrasound shows us where the main arteries and veins are running so we can avoid puncturing them with the needle.

Very rarely the needle can puncture and collapse the lung. This is called a pneumothorax. It can be easily treated once recognised. If there is a small air leak from the lung you can sometimes feel cracking under the skin in your neck. This is not dangerous and will clear in 24-48 hours.

The preparation and after care information detailed for bronchoscopy is the same for EBUS. Your consultant or specialist nurse will be able to tell you which procedure you require and the reason why this is necessary.

### **When will I get the test results?**

An outpatient appointment will be made for you to see the doctor usually within one week to discuss the results of the test.

### **What if I have any questions?**

Remember your doctors and nurses are here to help you.

If you have any questions about your symptoms or your bronchoscopy test, don't be afraid to ask.

We hope that this leaflet is useful to you and has given you an idea about what to expect.

## Useful contact numbers

### North Tyneside General Hospital

Endoscopy Unit 0191 293 2580  
or contact your consultant's secretary

### Wansbeck General Hospital

Respiratory Office 01670 529304  
Endoscopy Unit 01670 529063

### Hexham General Hospital

Secretary 01434 655646  
Endoscopy Unit 01434 655321

## Sources of Information

### British Thoracic Society

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







## **Alternative Formats**

If you would like a copy of this information in large print, another language, audio tape or other format please call the Contact Centre on **03 44 811 8118**

## **Other sources of information**

### **NHS 111**

### **NHS Choices**

[www.nhs.uk/pages/homepage.aspx](http://www.nhs.uk/pages/homepage.aspx)

### **NICE (National Institute for Health and Clinical Excellence)**

[www.nice.org.uk](http://www.nice.org.uk)

### **Patient Advice and Liaison Service (PALS)**

Freephone: **0800 032 0202**

Text: 01670 511098

Email: [northoftynepals@nhct.nhs.uk](mailto:northoftynepals@nhct.nhs.uk)

### **Northumbria Healthcare NHS Foundation Trust**

General Enquiries **03 44 811 8111**

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

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