

PATIENT INFORMATION

# ENDOBRONCHIAL ULTRASOUND (EBUS)



**This Patient Information Leaflet explains the procedure of EBUS, what to expect, as well as answering some frequently asked questions.**



It has been recommended that you have a procedure called an Endobronchial Ultrasound (EBUS). An EBUS is a specialised procedure that allows the doctor to look into your lungs (similar to a bronchoscopy), and take samples of the glands in the centre of your chest (mediastinum). A flexible tube, with an ultrasound probe at the end (no larger than your little finger) is passed through your mouth into your lungs. You will receive some medication (sedation) prior to the procedure to help you relax and some medication to numb your throat (local anaesthetic), so that it is as comfortable as possible.

### **Why do I need this test?**

Lymph glands can be enlarged in the centre of the chest for several reasons. The most effective way to determine the cause of this enlargement is to obtain a sample of the lymph nodes, which can be done in a safe and less invasive way by this procedure.

### **Are there any alternatives to this test?**

Alternatively, we can refer you to a thoracic (chest) surgeon at another hospital in the West Midlands for a procedure called a cervical mediastinoscopy. This test requires a general anaesthetic and is performed by making an incision at the bottom of the neck and passing a camera through. Should this be indicated, we would discuss this with you at the time.

### **What should I do before the test?**

- As you are receiving sedation, you will need to be collected after the procedure, and ideally **we recommend that you have someone with you at home for 12 hours.**
- For 24 hours after the procedure it is advisable to refrain from any alcohol, avoid the use of sleeping tablets, do not drive and no operating machinery. It would be appropriate to stay off work during this time.

- If you have any problems with transport, please contact your GP who can organise this for you. Please let the Consultant's secretary know if there are any issues regarding this.
- You should not eat for 4 hours before the test. You may drink plain water up until 2 hours before the test. Other drinks (e.g. tea with milk) should not be drunk for 4 hours before the test.
- Take your usual medication(s) with a small sip of water, and bring any essential evening medication with you.
- If you are diabetic, seek advice from your doctor about your medication.
- It is advisable that you do not smoke on the day of the procedure as this can make your coughing worse.

### **You should tell the doctor performing the procedure if:**

- You are taking any medicines which "thin the blood" such as **Aspirin, Warfarin, Clopidogrel, Dipyridamole, Rivaroxaban, Apixaban, Dabigatran or Edoxaban**; or have a prosthetic/mechanical heart valve and are taking Warfarin, in which case your hospital doctor will discuss your case with you and provide further advice.
- You have any allergies
- You have had a heart attack in the last 6 weeks
- You suffer from asthma
- You have a history of endocarditis (infection of the heart valves), rheumatic fever, or have had your spleen removed

### **What happens during the procedure?**

A member of the nursing team will explain to you what will happen during your procedure. You will be given an identity band to wear on your wrist, and advised to remove any dentures.

A small needle will be inserted into your hand or arm. This is to ensure you have the medication you need to relax you for the procedure.

The sedation will make you feel relaxed, calm and sleepy but not "knocked out", often patients may not remember anything about the test.

During the procedure you may experience some slight discomfort but some anaesthetic spray will be gently put in the back of your throat – there may be a taste similar to bitter bananas. A mouth guard will be inserted into your mouth in order to pass the camera through. You may notice a different sensation to your breathing and swallowing, which is normal. This is because the throat becomes temporarily "frozen" (very much like the

tooth at the dentist when an anaesthetic is injected) but you will be able to breathe and swallow normally (it may just feel a little different).

Once the camera is in the throat, a small amount of 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 down very quickly and the numbing effect of the anaesthetic will remove this sensation. The doctor and nurse team will support and reassure you throughout.

Your doctor will pass the camera through your mouth, down the back of your throat and into your wind pipe and bronchial tubes. He will pass a fine needle through the camera into the lymph glands to obtain samples. This will not hurt but may make you cough briefly.

You will be given oxygen via small tubes placed just inside your nostrils during and for a short time after the procedure, your oxygen levels will be monitored at all times.

The whole procedure can take between 20-40 minutes on average, depending on how many samples are taken.

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

- You will be allowed to rest within the endoscopy unit where a nurse is always present.
- You may continue to receive oxygen for a short while.
- As your throat has been anaesthetised you may feel that you cannot swallow properly. This feeling will wear off within 60-90 minutes, after which time you will be allowed a drink. You may find your throat feels sore for a day or so.

### **Are there any risks or complications involved?**

This is a safe procedure, but like all medical tests or operations there are some risks involved. Unexpected complications are very unusual. The national statistic is approximately 1 in 1,000 reported complications including the possibility of:

- Significant bleeding
- A chest infection
- A collapse of one of the lungs

### **After care advice**

Avoid driving for 24 hours after the procedure.

You may cough up small amounts of blood in your sputum for 24-48 hours after the procedure this is quite normal and should settle down.

However, although very rare should you cough up large amounts of blood, experience chest pain or increased shortness of breath you should report to the accident and emergency department or call 999.

## Results

The results of any samples are usually ready within a week and will be sent back to your referring Consultant. Some results, however, can take a number of weeks before the final results are known. Your Consultant will then make the necessary arrangements to see you with the results, as needed.

Occasionally, we may not be able to obtain any samples or the samples may not provide us with the information we need and in such circumstances, your Consultant will discuss further tests and management with you.

If you have any specific concerns that you feel have not been answered and need explaining, please contact the following.

- Respiratory Department Alexandra Hospital (**phone 01527 503881**)
- Respiratory Department Worcester Royal Hospital (**phone 01905 733053**)

## Other information

The following internet websites contain information that you may find useful.

- [www.worcsacute.nhs.uk](http://www.worcsacute.nhs.uk)  
Worcestershire Acute Hospitals NHS Trust
- [www.patient.co.uk](http://www.patient.co.uk)  
Information fact sheets on health and disease
- [www.rcoa.ac.uk](http://www.rcoa.ac.uk)  
Information leaflets by the Royal College of Anaesthetists about 'Having an anaesthetic'
- [www.nhsdirect.nhs.uk](http://www.nhsdirect.nhs.uk)  
On-line health encyclopaedia

**If your symptoms or condition worsens, or if you are concerned about anything, please call your GP, 111, or 999.**

## **Patient Experience**

We know that being admitted to hospital can be a difficult and unsettling time for you and your loved ones. If you have any questions or concerns, please do speak with a member of staff on the ward or in the relevant department who will do their best to answer your questions and reassure you.

## **Feedback**

Feedback is really important and useful to us – it can tell us where we are working well and where improvements can be made. There are lots of ways you can share your experience with us including completing our Friends and Family Test – cards are available and can be posted on all wards, departments and clinics at our hospitals. We value your comments and feedback and thank you for taking the time to share this with us.

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

If you have any concerns or questions about your care, we advise you to talk with the nurse in charge or the department manager in the first instance as they are best placed to answer any questions or resolve concerns quickly. If the relevant member of staff is unable to help resolve your concern, you can contact the PALS Team. We offer informal help, advice or support about any aspect of hospital services & experiences.

Our PALS team will liaise with the various departments in our hospitals on your behalf, if you feel unable to do so, to resolve your problems and where appropriate refer to outside help.

If you are still unhappy you can contact the Complaints Department, who can investigate your concerns. You can make a complaint orally, electronically or in writing and we can advise and guide you through the complaints procedure.

## **How to contact PALS:**

**Telephone Patient Services: 0300 123 1732 or via email at: [wah-tr.PET@nhs.net](mailto:wah-tr.PET@nhs.net)**

## **Opening times:**

The PALS telephone lines are open Monday to Thursday from 8.30am to 4.30pm and Friday: 8.30am to 4.00pm. Please be aware that a voicemail service is in use at busy times, but messages will be returned as quickly as possible.

If you are unable to understand this leaflet, please communicate with a member of staff.