

Endobronchial Ultrasound (EBUS)

Endoscopy Department



Patient information leaflet

This leaflet will help you and your family to understand more about an Endobronchial Ultrasound Scan (EBUS). There will be chance to ask any questions you may have in the Endoscopy department immediately before the test.

What is an EBUS?

EBUS is a test which allows sampling of lymph nodes within the chest by passing a fiberoptic scope (special camera / telescope) down into the lungs through the mouth. By this means, it is possible to take a small sample of tissue (a biopsy), which may be sent to the pathology lab for examination under a microscope.

Why do I need an EBUS?

An EBUS is usually suggested if you have enlargement of the lymph nodes within the chest. Often this helps diagnose the cause of the lymph node enlargement.

Are there any risks?

EBUS is very safe, but there are sometimes side effects and, rarely, complications which you need to be aware of in order to decide whether or not to agree to have this procedure.

Side effects

During the examination, coughing may occur, though local anaesthetic is used to reduce this as much as possible. After the test, it is likely that you will have a sore throat and / or hoarse voice for a short time. It is quite common to cough up small amounts of blood for a few hours after EBUS.

Complications

Major complications are uncommon, affecting one to five patients per 1000 procedures. These include significant bleeding, infection in the lung or an adverse reaction to local anaesthetic or sedative. It is also possible that the sedation may slow your breathing to the point that

the oxygen levels in your blood drop too low. Very rarely this is severe enough to require the help of a life-support machine and transfer to an intensive care unit. Even more rarely, cardiac arrest and death can occur. Such devastating complications are extremely uncommon, reportedly once per 10,000 procedures. The risk is greater in those who have serious lung or heart disease, though this is taken into account in weighing up the pros and cons of having the test.

Are there any alternatives?

The only alternative way of gaining this information is by a more invasive procedure called mediastinoscopy, which may be performed by a Thoracic Surgeon under general anaesthetic, though this is less-preferred. Of course it is always possible to decline any investigations and to let nature take its course, though your doctors would not recommend this.

How should I prepare for the EBUS?

Before the test you should not eat anything for at least six hours prior to your procedure. You can drink clear free fluids for up to two hours before the test. After this point you will be nil by mouth until after the procedure.

If you take any of the following medication you will need to contact the endoscopy unit on **(01483) 571122** ext. **4409** at your earliest convenience to discuss ceasing the medications in advance or reducing doses:

- Warfarin
- Clopidogrel
- Prasugrel
- Ticagrelor
- Apixaban
- Rivaroxaban
- Dabigatran
- Fragmin / heparin injections
- Aspirin
- Insulin and diabetic medications

What happens on the day of the examination?

When you arrive you will be seen by a nurse who will check your medical history, you will be asked to change into a hospital gown, your blood pressure taken and a small cannula inserted in the back of your hand.

We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves. You should receive the leaflet, **Helping you decide: our consent policy**, which gives you more information. If you do not, please ask a member of staff caring for you for a copy.

How is the EBUS procedure carried out?

You do not need a general anaesthetic for this procedure, as it is not painful. A sedative injection is given before the procedure starts and local anaesthetic is sprayed into your throat to numb the airway and reduce any coughing. A further local anaesthetic is given directly into the windpipe by a small injection into the neck.

You will be asked to lie down on a bed. After the sedative and the local anaesthetic have taken effect, the scope will be passed gently into your mouth and through the back of your throat into the lungs. Although the scope goes through the windpipe, it is easy to breathe, but you will be asked not to talk. The images from the scope are transmitted to a TV screen, which the doctor watches.

Samples are taken by inserting a needle through the bronchial tube into the lymph node. A small ultrasound probe on the end of the tube helps the doctor to locate the correct area to sample. The procedure takes about 45 minutes to 1 hour.

Post procedure care

You will not be able to eat or drink for a period of two hours after the procedure due to the numbness in your throat. You will be monitored in the recovery area until safe to go home. We do not routinely discuss the results of the examination with you before you go home, partly because the sedative makes it hard to remember things afterwards, but also because we do not know the results until the lab has analysed the tissue, which takes several days.

You must not drive nor operate machinery for 24 hours after the procedure. You should have someone at home with you until the following day, and should take it easy for 24 hours. You should not drink alcohol.

Going home

If you have sedation, you must have someone to escort you home and stay with you for 24 hours. He/she should come with you for the appointment or be contactable by phone when you are ready to leave. If you do not have an escort or have not arranged for someone to collect you, then your procedure will be cancelled. If you are unable to arrange someone to collect you, please contact us to discuss alternative arrangements.

The sedation lasts longer than you may think, so in the first 24 hours after your examination, you should not:

- drive or ride a bicycle
- operate machinery or do anything requiring skill or judgement
- drink alcohol
- take sleeping tablets
- go to work
- make any important decisions, sign contracts or legal documents.

You should rest at home following your procedure, you can eat and drink normally and should be able to carry out your normal activities 24 hours after the test.

What do I need to do after I go home?

If you have a question or concern after the test, please phone the Endoscopy Unit on **(01483) 571122** ext. **4409** between 8am–6pm.

Please consult your GP, contact 111, contact Royal Surrey County Hospital NHS Foundation Trust Accident and Emergency department on **(01483) 571122** ext. **4293** or go to your nearest A&E department if you develop any post procedure complications.

When will I know the results?

You should be given an outpatient appointment at the hospital within 2 weeks of the EBUS to discuss the results with your doctor.

Further information and support

The British Lung Foundation

- www.lunguk.org
- Helpline 08458 505020

References

- <http://www.cancerresearchuk.org/about-cancer/lung-cancer/getting-diagnosed/tests-diagnose/bronchoscopy-ultrasound-endobronchial-ultrasound>
- <https://patient.info/health/endobronchial-ultrasound-guided-transbronchial-needle-aspiration>

Contact details

If you require further information or advice, please feel free to contact us.

Endoscopy Unit

Telephone: 01483 571122 **ext** 4160 (8am–6pm, Monday to Friday)

During out of hours, advice can be obtained from your local accident and emergency department or GP.

PALS and Advocacy contact details

Contact details of independent advocacy services can be provided by our Patient Advice and Liaison Service (PALS) who are located on the right hand side as you enter the main reception area. PALS are also your first point of contact for health related issues, questions or concerns surrounding RSCH patient services.

Telephone: 01483 402757

Email: rsc-tr.pals@nhs.net

Opening hours: 9.00am–3.00pm, Monday to Friday

If you would like information documents in large print, on tape or in another language or form please contact PALS.

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Author: Caroline Smith

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