## EBUS-TBNA



Patient Information Leaflet

## What is EBUS-TBNA and why do I need one?

EBUS-TBNA stands for 'Endobronchial Ultrasound-guided Transbronchial Needle Aspiration'. It is a medical procedure used to examine and sample areas inside the lungs including the lymph nodes within the chest. It is usually performed under sedation. The doctor can look inside your airways, the tubes that carry air into your lungs, using a special scope that is fitted with a camera. At the same time they can take biopsies, if required, without making an incision. It is usually done as a day procedure and you would go home the same day.

The reason you have been advised to have this procedure is that after looking at your chest x-ray and/or CT scan the doctors believe there is a need to take a look at the lymph nodes inside your chest and take biopsies in order to determine your diagnosis and treatment plans.

## What are lymph nodes?

Lymph nodes are small glands located throughout the body. They form part of the immune system. They act as a filter to trap impurities such as bacteria and viruses. These lymph nodes can become enlarged for a number of reasons including infections, inflammatory conditions and some cancers. The best way to determine the cause of enlarged lymph nodes is with an EBUS-TBNA sample as described above.


## How is the procedure done?

EBUS-TBNA involves using a thin flexible tube called a bronchoscope which is about as thick as a pencil. The bronchoscope is fitted with a small camera and an ultrasound probe. It is passed through the mouth to the back of the throat, into the windpipe and then further into the airways within the lungs. The ultrasound probe produces pictures to allow the doctor to see the lymph nodes and select areas for sampling. A very fine needle is then used to take the sample from the right place. This is usually painless. The sample is then sent to the lab for tests to help reach a diagnosis.

## What are the risks?

EBUS-TBNA is considered a safe procedure and complications are rare. It is generally well tolerated. Minor complications include a sore throat, a hoarse voice and a cough which typically resolve quickly. Sometimes you may cough up small amounts of blood which again should settle within a couple of days. Rarely patients can acquire a chest infection after the procedure. Finally, there is a very small risk of air or blood leaking into the chest which might require treatment. The doctor performing the procedure will talk you through these risks and explain the side-effects in more detail before carrying out the procedure.

## Do I have to have an EBUS?

No, you do not. The decision is entirely yours and you can choose not to have an EBUS. If you are unsure then please feel free to contact us and discuss it. It is, however, worth noting that it would be more difficult for your doctor to determine your diagnosis and decide on the best treatment for you without having the test.

## What happens before the procedure?

Please do not have anything to eat or drink for at least six hours before your appointment. It is best not to smoke prior to the procedure. Take your usual medications with a small amount of water unless informed not to. Please bring a list of your medications to the appointment.

Please inform the bronchoscopy unit if you are diabetic and on insulin or diabetes tablets OR if you are on any blood thinning medication (listed below) as special arrangements will need to be made.

Blood thinning medications:

- Warfarin
- Clopidogrel
- Dipyridamole
- Ticagrelol
- Rivaroxaban
- Apixaban
- Dabigatran
- Enoxaparin (clexane) injection
- Dalteparin injection
- Other similar drugs

Aspirin is ok and does not need to be stopped.
If possible, please do not wear nail varnish or acrylic nails as this makes monitoring your oxygen levels more difficult. You will need to arrange for someone to escort you home and stay with you overnight. Please make sure that these arrangements are in place before you come for your appointment. Please inform the bronchoscopy unit if you are unable to make these arrangements as we can arrange a bed for you to stay in hospital overnight if required.

## What happens when you arrive on the day?

One of the nursing team will greet you and complete an admission assessment. You will be asked questions about your general health, medications and contact details. Your blood pressure, heart rate and oxygen levels will be measured. A small plastic needle (cannula) will be inserted into a vein in your hand or arm so that we can give you sedation medication during the procedure. A member of the team will go through the details of the procedure with you, answer any questions you may have and ask you to sign a consent form if you are happy to proceed.

## What happens during the procedure?

Local anaesthetic spray and gel will be applied to your nose and the back of your throat to make these areas numb. You will also be given sedation medication to help you relax during the procedure; this is given through the needle (cannula) in your hand or arm. It is not a general anaesthetic and so you will remain conscious but you will feel very sleepy and relaxed. The nursing staff will keep a close eye on your 'observations' which includes your heart rate, oxygen levels and blood pressure throughout the procedure.

The bronchoscope will then be passed into your airways as described above. A fine needle is then passed down the bronchoscope and into the lymph node and a sample is taken. This is painless and you will not be aware of it happening. More than one sample may be needed during the procedure. The procedure usually takes between 20-40 minutes.

## What happens after the procedure?

At the end of the examination the bronchoscope will be removed which should cause no discomfort to you. Your throat and nose will be numb from the local anaesthetic for up to an hour after the examination but will then feel back to normal. You will be taken to the recovery area where you will remain until the sedation and local anaesthetic have worn off. You will be given a drink and a snack before you are discharged from the unit. You should be able to go home after you have had something to eat or drink. Rarely, patients may be asked to stay in hospital overnight if there have been any complications or if the doctor has any concerns.

## What happens when you leave the hospital?

As described above you may experience a sore throat, slight cough or small amounts of blood when you cough or blow your nose, this is fairly normal and should settle. You may also notice a slight rise in your temperature. These should all settle over the next 24-48 hours.

If any of these symptoms last longer than 48 hours or you are coughing large amounts of fresh blood, developing chest pain or worsening breathlessness then either contact the hospital on the numbers provided, your local GP or your local A\&E Department.

## Rest

Following the procedure it advisable to rest for the remainder of the day. For the next 24 hours do not drive a car/motorcycle, operate any machinery, sign any legal documents or drink any alcohol. Someone should stay with you overnight.

## Medications

Continue taking your usual medications unless advised otherwise.

## Follow up

You will be seen in the outpatients department in due course to discuss your results. You will receive an appointment for this either through the post or a phone call. If your doctor needs to see you for review any sooner they will arrange this before you go home.

## Staff

The procedure will be performed by specially trained doctors who do these on a regular basis. The nursing staffs in the unit are trained to look after patients going through these procedures. Manchester University NHS Foundation Trust supports the training of junior doctors and therefore your consent or procedure may be undertaken by these trainees who will be directly supervised by specialist consultants within the bronchoscopy Unit. This will only happen with your permission.

## Research

Manchester University NHS Foundation Trust is at the forefront of research in a variety of respiratory conditions. You may be asked to consider taking part in a clinical trial. If approached, further information will be given to you and you will be asked for additional consent if you decide to proceed. You are under no obligation to take part in research. Deciding not to take part will not affect your care.

> Any problems - If you require any advice, help or support once you are home, do not hesitate to contact us on the attached numbers.

