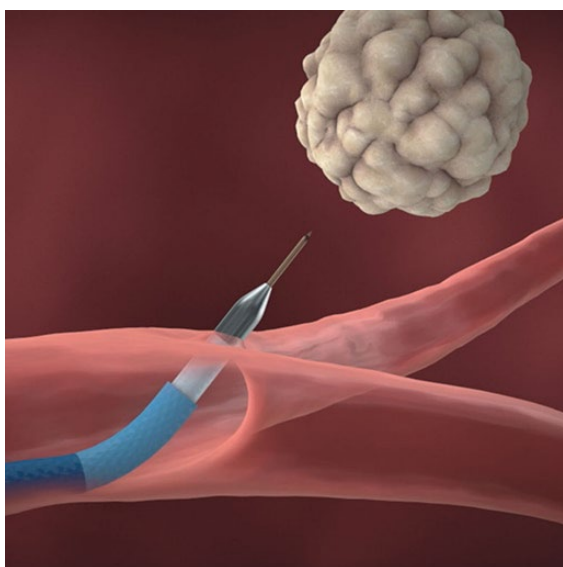


Electromagnetic Navigational Bronchoscopy (ENB)

We have given you this factsheet because you are due to have a procedure called an electromagnetic navigational bronchoscopy (ENB). It explains what the procedure involves, how to prepare for the procedure, and the potential risks and benefits. We hope it will answer some of the questions you may have. If you have any further questions or concerns, please contact a member of our team.

What is an electromagnetic navigational bronchoscopy (ENB)?

An electromagnetic navigational bronchoscopy (ENB) is a medical procedure that uses electromagnetic GPS-like technology to examine your lungs. It is more accurate than a normal bronchoscopy and can reach more areas of the lungs. During an ENB, a bronchoscope (a long, flexible tube with a bright light at the end of it) is guided down a person's throat and into their lungs to examine any abnormal areas (these are called nodules). Biopsies (small samples of body tissue) can also be taken from inside the lungs during this procedure, to determine whether any further treatment is needed.



Why do I need this procedure?

You may have been referred for an ENB if an area of abnormal tissue (nodule) was detected on a chest X-ray or CT scan. Most lung nodules are nothing to worry about, but some can be a sign of early lung cancer. This is why it is important to find out what the nodules are as soon as possible, so we can offer the right treatment for you. The doctor who referred you for this procedure will explain this to you in more detail.

General anaesthetic

The procedure will be performed under a general anaesthetic. This means you will be asleep for the procedure and will not feel anything. To ensure you are well enough for a general anaesthetic, an anaesthetist (a specialist doctor) will visit you before your procedure and ask you some questions about your medical history and your general health and lifestyle. This may be at your pre-assessment appointment or on the day of your procedure.

Information for Patients

During the procedure

Before we begin the procedure, we will take you into theatre where an anaesthetist will give you the general anaesthetic. This may be given:

- As an injection through a cannula (a thin tube that allows medication to be given into a vein) in the back of your hand
- As a gas through a face mask

Once you are asleep, we will gently guide a bronchoscope (a long, flexible tube with a bright light at the end of it) down your throat and into your lung. When the bronchoscope is in your lung, we will use GPS technology to create a map of the inside of your lungs. This map will help us to carefully navigate the bronchoscope around your lungs. If we decide to take a biopsy of any nodules, we will insert biopsy tongs (forceps) through the bronchoscope into your lung.

After the procedure

After the procedure, we will move you to our recovery room where you will gradually wake up from the general anaesthetic. You will stay in the recovery room until the effects of the general anaesthetic have worn off. During this time, we will regularly check on you. When you are well enough we will send you home.

Please let us know if you have any pain or feel shorter of breath than normal at any point.

Going home

Depending on your recovery, you may be able to go home the same day, or you may need to stay in hospital overnight. Most people are able to go home when they feel well and are able to pass urine, and eat and drink without difficulty.

Potential side effects

After the procedure, it is common to experience some of the side effects below:

- Tiredness
- A sore throat (this should improve over a few days, and you can take some over-the-counter pain relief medication to ease your symptoms)
- A cough which brings up a small amount of blood (this should stop after a few days)
- Low blood pressure (this will usually improve after having something to drink)

When to seek medical advice

Contact the Ambulatory Care Day Unit (between 08:00 and 19:00), your GP, or phone 111 immediately if you are worried about the amount of blood you are coughing up or if you have any of the following symptoms:

- Increased shortness of breath
- Vomiting (being sick)
- A high temperature (38°C or above)

Potential risks

An ENB is usually a safe, straightforward procedure. However, as with all procedures, there are some potential risks.

Information for Patients

Minor risks after an ENB include:

Damage to teeth/lips/mouth

A chest infection (moving around early on after the procedure will help to prevent this)

A temporary narrowing of your airways (this is called bronchospasm and may cause you to cough and feel wheezy)

Minor bleeding at the biopsy site.

Non-diagnostic biopsy (unable to get a firm diagnosis)

Major risks after an ENB are rare and include:

A collapsed lung (this is called pneumothorax and if this happens, you may need to stay in hospital longer to have a chest drain).

Results

We will not be able to give you your results on the day of the procedure, as it can take several weeks for biopsy results to be available. You will be contacted with the results once they are available.

Alternative procedures

There are no alternatives to this procedure. If you choose not to have the procedure, then you will need to have more scans to look at the abnormal area of your lung. If the area becomes bigger, your doctor will talk to you about what treatment you may need.

Contact us

Ambulatory Care Day Unit 0121 371 3126

For any non-urgent queries, please contact our Thoracic Surgery Department:

Telephone: 0121 371 2128 or 0121 371 2104

Useful links

This is a video demonstrating an ENB procedure:

www.youtube.com/watch?v=96WqA0tg_H8

If you require this information in another format, such as a different language, large print, braille or audio version, please ask a member of staff or email patientexperience@uhb.nhs.uk