

There may be students and observers present during your consultation as part of their ongoing training. Please let the staff know if you do not wish any students to be present during your attendance.

Please ask a member of staff if you would like a chaperone present during your procedure.

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# Peripheral Bronchoscopy

## patient information leaflet

If you need this leaflet in a different language or accessible format please speak to a member of staff who can arrange it for you.

اگر به این بروشور به زبان دیگر یا در قالب دسترس پذیر نیاز دارید، لطفاً با یکی از کارکنان صحبت کنید تا آن را برای شما تهیه کند.

Jeśli niniejsza ulotka ma być dostępna w innym języku lub formacie, proszę skontaktować się z członkiem personelu, który ją dla Państwa przygotuje.

Dacă aveți nevoie de această broșură într-o altă limbă sau într-un format accesibil, vă rog să discutați cu un membru al personalului să se ocupe de acest lucru pentru dumneavoastră

如果您需要本传单的其他语言版本或无障碍格式，请联系工作人员为您安排。

إذا احتجت إلى هذه النشرة بلغة أخرى، أو بتنسيق يسهل الوصول إليه، يرجى التحدث إلى أحد الموظفين لترتيب ذلك لك.

## What is peripheral bronchoscopy?

Peripheral bronchoscopy (also called virtual navigational bronchoscopy with radial EBUS), is an advanced technique to take a sample from deep inside the airways/lungs.

A CT scan is performed prior to the procedure, which is then used to create a map of how to reach the abnormality seen in the lungs. Sedation and local anaesthetic are used to make the procedure more comfortable. A thin flexible tube (called a bronchoscope) is inserted via the nose or mouth and into the airways, deep into the lungs to obtain the samples.

Once the abnormal area is reached, an ultrasound probe is passed through the bronchoscope to ensure that the correct area is being biopsied and then different samples can be taken.

Date

**Hospital: Whiston Hospital, Warrington Road.**

**Please attend the Radiology Department at 12 o'clock on Level 0 for your CT scan.**

**Once the CT scan is completed, please attend the Endoscopy Unit on Level 1.**

## What if I refuse to have the procedure?

It is your choice to have the procedure and you will never be forced to do anything you do not want to do. If you do not want to have the procedure, this may result in delays in making a diagnosis and delays in receiving treatment.

## How long do the results take?

The initial results of the biopsies usually take 7-10 days. You should already know when your follow up appointment is, but sometimes this needs to be postponed if the results are delayed.

If the results do confirm a diagnosis of cancer, sometimes more sophisticated molecular tests are performed on the samples dependent on a number of factors. If needed, these are sent to another laboratory and can take a few more weeks and the results will be sent directly to the oncology doctors.

## What are the side effects?

You may have a mild sore throat for a couple of days after the test. It is also quite common to cough up a small amount of blood for a couple of days after the test, but this usually settles quickly.

However, if you feel very unwell, cough up a large amount of blood or develop a fever, you should contact the lung nurse specialists. If it is out of hours, ring 111 or attend your local Accident and Emergency Department.

Following a peripheral bronchoscopy, there is a small risk of air leak and lung collapse. This is rare but if you experience shortness of breath or chest pain you should call 999.

More serious complications are very rare and will be explained to you before you sign the consent form.

## What are the alternatives to the procedure?

Sometimes a procedure called a CT guided biopsy may be an alternative method to obtain a biopsy; this is performed by the radiology doctors. Your doctor will have discussed whether this is a possibility and provided further information if necessary.

On occasion a surgical biopsy may also be considered, but generally we prefer to reserve it as a final option as it involves an operation with a general anaesthetic which has more risks.

## Why do you need a peripheral bronchoscopy?

Most commonly, peripheral bronchoscopy is carried out for shadows seen in the lung that are too deep for 'standard' bronchoscopes to reach. This is mainly for us to determine if the shadow in the lung is a cancer or a benign lesion. In approximately 70% of patients, we expect this procedure to give us an answer.

## What should you do before coming to the hospital?

You will require blood tests and a breathing test these will be requested by your respiratory consultant.

Because you are having sedation, it is very important to ensure that someone is available to take you home from hospital and stay with you overnight.

You will not be able to eat for 4 hours before the procedure, but you can take sips of water until 2 hours beforehand.

Take your usual medication on the day of the test, with a small sip of water unless told not to by your doctor.

If you take any of the following medications, they must be stopped before the procedure as follows:

| Medication                                 | How long to stop for |
|--|----------------------|
| Clopidogrel/ticagrelor                     | 7 days               |
| Warfarin                                   | 5 days               |
| Apixaban/rivaroxaban, edoxaban, dabigatran | 3 days               |

## What happens when you arrive at the hospital?

You will have a CT scan when you first arrive at the hospital.

You will need to attend the Radiology Department on Level 0 of the hospital, for the scan at 12 o'clock.

Once your CT scan has been completed, you will need to go to the Endoscopy Unit on Level 1 of the hospital.

You will be seen by a member of the team, who will ask you some questions, ask you to sign a consent form and insert a cannula (a small tube into a vein so medications can be given).

If you have any questions, please do not hesitate to ask before you sign the consent form.

## What happens during the test?

The doctor will have already reviewed your CT scan before you enter the procedure room.

The nurse will ask you to confirm your name and address and you will be asked to remove any false teeth or glasses. The doctor will spray a local anaesthetic to the back of your throat. A combination of two sedatives are given through the cannula. These help to relax you during the procedure and reduce any cough but do not put you to sleep.

Following sedation, patients may not remember anything about the test.

Your pulse and oxygen levels are monitored throughout the procedure and you will be given oxygen through a small tube just inside your nostrils.

There will be a different sensation of breathing and swallowing due to the medication given, this is completely normal and nothing to worry about. It is also very common to cough with this procedure; this does tend to settle as more medication is given.

You will be given more local anaesthetic to the vocal cords. This can either be given via an injection to the throat or through the bronchoscopy and will depend on the clinician's own technique.

The bronchoscope will then be passed either via the nose or mouth and directed to the area indicated on the CT scan. Once this area has been identified, an ultrasound probe will be passed through the bronchoscope to ensure that it is in the correct position. Once this has been confirmed, samples will be taken; usually a combination of biopsies, brushings and washes. Taking samples is not painful but can be uncomfortable and can cause coughing and bleeding.

## What happens after the test?

The test usually takes between 30-60 minutes depending on how many biopsies need to be taken. Afterwards, you will be taken to the recovery area to be monitored until the sedative has worn off. You will need a chest x-ray following the procedure.

You will not be able to eat or drink anything until the local anaesthetic has worn off - this usually takes around an hour or two. Once the nurses are happy, you will be able to go home and rest.

You **must not** drive, drink alcohol, operate heavy machinery or sign legally binding documents for 24 hours after the sedation.