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Bwrdd Iechyd Prifysgol
Aneurin Bevan
University Health Board

CT Guided Lung Biopsy

Respiratory



Why have I been advised to have this investigation?

Your consultant has requested that you have a fine needle biopsy to help identify the cause of the shadow on your chest x-ray. The purpose of this procedure is to obtain a small sample of lung tissue for analysis in the pathology laboratory. This type of biopsy is usually successful in determining whether the shadow on the chest x-ray is due to a lung cancer. However, a negative biopsy result will not necessarily exclude this possibility.

Where will this be done?

The procedure will be performed in the X-ray department by a Radiologist, using either ultrasound or x-ray control. The procedure is performed as a day case within the radiology department. You will be given a time to attend the radiology department at Nevill Hall Hospital and met by the radiology staff and/or the nurse specialists working in the respiratory team. In some cases patients may need a short stay in hospital after the biopsy.

Can I eat and drink before the tests?

You should have nothing to eat for 4 hours prior to the procedure and then only water for up to 2 hours before the procedure.

Do I take my tablets on the day of the test?

Yes, generally. The doctors you saw in clinic will have checked your medications with you. Please ask if you are to take them. You should not be taking Warfarin, Heparin, newer blood thinners (e.g. Apixaban) and certain medications for diabetes (Metformin). We may need to arrange a blood test (INR) before the procedure if you are taking Warfarin. If you take a drug called Clopidogrel, this should generally be stopped 7 days prior to the biopsy. However, if you have had a coronary stent placed within the last 1 year, we would need to discuss this with your Cardiologist.

What does this involve?

The procedure involves cleaning the skin, injecting a small amount of local anaesthetic and then introducing a small biopsy needle into the required part of the lung. The needle may have to be introduced more than once. It is a quick procedure and should take no more than 45 minutes. Once a satisfactory sample has been obtained, you will be transferred to another room in the radiology department for observation. Most patients are discharged home later the same day after a period of observation and satisfactory X-ray to exclude lung collapse (pneumothorax). You should attend the appointment with someone else who should drive you home after the test. Public transport should be avoided to get back home after the biopsy, with a taxi or other privately arranged transport recommended. There must be someone to stay with you overnight. Please bring an overnight bag with you in case you need to stay.

Are there any complications?

This is usually a straightforward procedure, but complications can occur:

- A small number of patients develop a collapse of the lung caused by a leakage of air into the space around the lung (a pneumothorax). This may happen in around 1 in 5 procedures. This will normally be detected on the chest x-ray prior to your discharge from hospital. In most cases no treatment is required, although you may be advised to remain in hospital overnight for further observation. Very occasionally (in up to 5 out of 100 procedures) the pneumothorax may be large or you may develop symptoms which require treatment. This may involve inserting a small drainage tube into the chest and a stay in hospital for a day or two or a smaller tube (vent) may be inserted into the chest which you can have in place to go home and then return to the ward the next day for review.

- It is common to cough up some blood for a day or two after the procedure. This normally resolves without treatment and will not necessarily delay your discharge from hospital. Severe bleeding is a very rare event.

What should I do when I get home?

1. You should rest for the next 24 hours. Heavy straining and lifting should be avoided for 48 hours.
2. If there is any discomfort from the biopsy site, a mild painkiller such as Paracetamol may be taken.
3. If you cough up more than a few teaspoons of blood then you should attend the nearest Accident and Emergency Department. Also, if you become more breathless than normal, or experience severe chest pain within 24 hours of returning home then you must then go to your nearest Hospital Accident and Emergency Department.

You will be contacted by one of the respiratory secretaries with a time for the procedure. Please insert those details below:

Please report to the reception desk at the radiology (X-Ray) department, Nevill Hall Hospital

- **At**
- **On**

Please try to arrive in good time

You will receive an information leaflet at discharge providing explanation as to what to do in the event of a symptomatic complication at home.

**"This document is available in Welsh /
Mae'r ddogfen hon ar gael yn Gymraeg"**