

## What is a lung biopsy?

During a lung biopsy a small piece of lung tissue is removed, using only a tiny cut in the skin and a thin needle. The tissue is then examined under a microscope by a pathologist (a doctor trained to make a diagnosis from tissue samples).

You will be awake during the procedure.

## Who will do my biopsy?

The biopsy will be done by a radiologist (radiology doctor) who specialises in doing this type of procedure. A nurse will assist the radiologist.

## Why do I need a lung biopsy?

Previous scans have shown an area of your lung is abnormal but it is not possible to tell exactly what the abnormality is. Your doctor has discussed your scans with a radiologist and they have agreed that a biopsy is the best way to proceed.

## How do I prepare for the procedure?

You will need to stop eating and drinking before your procedure, please refer to your appointment letter for these instructions.

You may need to have some blood tests. The doctor who referred you for the procedure will contact you if these are necessary.

## Can I take my normal medicines?

Continue to take all your usual medications unless told otherwise.

If you are taking medications that thin the blood you should have received instructions from the doctor who referred you for the biopsy as to if and when you need to stop taking this medication. Medications that thin the blood, include; ASPIRIN, WARFARIN, CLOPIDOGREL (Plavix) and DABIGATRAN (Pradaxa)

**Diabetics:** please refer to your appointment letter. It is important to have a normal breakfast but you may need to adjust your medication. Please contact your GP for advice.

## What happens on the day of the procedure?

You will be admitted to the Interventional Recovery Ward where a nurse will go through a checklist with you and help prepare you for the procedure.

## What happens during the procedure?

The biopsy will be done in the Radiology Department in either a CT or Ultrasound scanning room.

You will be asked to lie on the scanning table in the position that the radiologist has decided is most suitable. It is important that you stay very still until the procedure is finished. If you are uncomfortable please let the staff know.

The scanner is used to help the radiologist decide on the most suitable place to insert the biopsy needle. Once this decision has been made, the skin around this area is cleaned with an antiseptic wash, this can be cold. Some of your body will then be covered with a sterile sheet.

A local anaesthetic is then injected, initially this stings but it will numb the skin and deeper tissues. Scans will be taken to help the radiologist guide the needle into the abnormal tissue. Once the needle is in position the samples will be taken. You may be asked to hold your breath at this time. The radiologist will need to take two to three samples.

## What happens after the procedure?

Once you are back in the ward you will have to stay in bed for up to 4 hours while being monitored.

You may also need a chest x-ray.

It is important to report any changes in your condition to your nurse.

We aim to discharge on the same day but there is a small possibility that you will need to stay overnight in hospital if there are complications from the procedure, if you live alone or a long distance from the hospital. Please bring an overnight bag just in case.

You will not be discharged home until it is considered safe to do so.

***You must not drive yourself home after the procedure and we recommend that you have a responsible adult stay with you until the following morning.***

## When can I return to normal activities?

You should spend the day after your procedure resting quietly at home. You should avoid heavy lifting or strenuous exercise for several days after the biopsy.

[continued]

You will be given advice about when you may return to normal activities and re-commence any medications you may have stopped before leaving the ward.

### **How do I get the results?**

The doctor who referred you for the biopsy is responsible for giving you the results. The samples take at least 2 working days to be processed. You will receive an outpatient appointment or be phoned with the results.

Please discuss this with the nursing staff before you leave the ward to make sure this has been arranged.

### **Will it hurt?**

The local anaesthetic used to numb the area stings for a few seconds when it is first injected. You may also feel a pushing sensation when the sample is taken but the procedure should not be painful and if it is please let the radiologist or nurse know.

### **Are all biopsies successful?**

Not all biopsies are successful. This may be because the piece of tissue has been taken from normal tissue rather than the abnormal tissue. Alternatively, the amount of abnormal tissue obtained may not be enough for the pathologist to make a diagnosis. Nine out of 10 lung biopsies are successful but occasionally the procedure may need to be repeated or another test performed.

### **Are there any risks?**

As with all medical procedures there are risks. If complications occur they are usually mild, severe complications can occur but these are rare. We have included the most common complications in this information sheet. The possibility of these occurring will vary for each patient and will be discussed with you.

It is possible that air may get into the space around the lung. This is known as a collapsed lung or a pneumothorax. If this occurs the air may need to be drained either with a needle or with a small tube put in through the skin. Less than 1 in 20 patients will have this complication.

Other risks and complications:

- Bleeding – but don't be alarmed if you cough up a small amount of blood after the procedure
- Infection
- Soreness and bruising at the biopsy site

Despite these possible complications, a lung biopsy is regarded as a safe procedure and can save you from having a bigger procedure with greater risks.

### **Consent for the Procedure**

The clinician who referred you for the biopsy should discuss the procedure with you. You should make sure you understand the reason for the procedure, any risks involved and the success rates.

Before the procedure starts you will be given another explanation of the procedure by the radiologist. Any questions that you have will be answered at this time. If you wish to have the procedure done you will be asked to sign a consent form. This means you have agreed to have the biopsy done and that you understand the risks and why it is needed.

If after discussion with your doctor or the radiologist, you do not want the procedure, you can decide against it or ask for more information. If you feel during the procedure that you do not want it to continue we will explain the implications of not doing so, to help you make an informed decision.

If the radiologist feels your condition has changed and that the biopsy is no longer necessary then he/she will explain this to you and your doctor. At all times your doctor and the radiologist will be acting in your best interests.

### **Comments / Complaints**

If you have any comments or suggestions please tell one of the staff before you leave, or you can contact the Consumer Experience Facilitator on 04 806 0724 or fill in a consumer feedback form.

You must seek urgent medical treatment after the procedure if you experience:

1. ongoing pain that does not settle after 2-3 days
2. ongoing bleeding at the injection site
3. the onset of other symptoms after the procedure such as shortness of breath, nausea, vomiting or fever

**For emergencies call 111 or contact your local After Hours Centre or Hospital Emergency Department**

There are no lockable facilities in Radiology. We strongly recommend that any valuables are left at home. Please be aware that CCDHB does not take responsibility for any loss or damage of personal property belonging to patients whilst on CCDHB premises.