

# Lung Biopsy

## Patient Information

Your doctor has referred you for a biopsy of your lung. This is done to allow us to determine the cause of the abnormality which has been demonstrated in your lung, probably on a recent chest X ray or CT scan of your lung.

### **What will happen?**

The procedure will be performed by a radiologist using a CT scanner to guide accurate placement of the needle. We will ask you to lie on the CT table and some preliminary scans will be performed in order to tell us where we should put the local anaesthetic into your skin. Once we have numbed the skin with local anaesthetic, you will be asked to hold your breath for a few seconds and a biopsy needle will be used to remove a small sample of tissue. When we take the biopsy, you may here the clicking noise of the biopsy instrument or feel a brief, sharp pulling sensation in your chest. This is expected and nothing to worry about. You will need to say for about 2 hours after the biopsy for observation and will require someone to drive you home.

This will be examined under a microscope in order to determine the cause of the abnormality in your lung. We will not be able to tell you the cause of the abnormality at the end of the procedure, but we will have a cytologist check to make sure that we have enough tissue to enable a diagnosis to be made. The material we have removed will then be prepared on a slide, stained, and examined by a pathologist in detail. The final result takes about 1 week to come back to your doctor.

### **What preparation is required?**

You will need to fast for two (2) hours before the procedure.

If you are taking Warfarin or Clopidogrel you will need to see you doctor to arrange for you to stop these medications, your Doctor will need to arrange other medications during that time and for you to have a blood test to day before your procedure to ensure your clotting times are normal.

You will need to stay in our facility for 2 – 4 hours afterwards and to organise for someone to drive you home and stay overnight with you.

### **Are there any risks or complications of the procedure that you should know about?**

We have determined with your doctor that, on balance, the risks of having this procedure, which are described below, are probably less than the benefits that you may gain by knowing the cause of the lesion in your lung.

The commonest risk of a lung biopsy is a leak of air into the tissue surrounding the lung (this is known as a pneumothorax). This occurs in 1 in 5 people who have the procedure and generally resolves by itself without treatment. Most people who have this complication have no symptoms. However, in about 5 in 100 people, the air leak is so large that it can cause the lung to collapse, causing chest discomfort and making it more difficult for you to breathe. We treat this while you are on the CT table by inserting a small, plastic chest tube which will drain the air and enable you to breathe normally. If you need a chest tube, you will need admission to hospital for a few days until your symptoms have resolved and the air leak has ended.

About 1 in 15 patients cough up blood after a lung biopsy. This is known as haemoptysis. It almost always stops by itself within a day or so. However, about 1 in 200 patients will have to be admitted to hospital to have the haemoptysis treated because it is large in amount or persistent. This treatment could involve surgery or an interventional radiology procedure to stop the bleeding. The risk of bleeding is much higher if you are taking anticoagulant (blood thinning) medication, and you will be asked if you are taking these before the procedure. They may need to be stopped, in consultation with your doctor, some time before the biopsy.

The risk of infection at the biopsy site is very low. We take every precaution in order to maintain sterile conditions during the procedure. If you develop redness or pain which increases in the days after the biopsy, see your local doctor.

Please let us know if you have any questions or concerns about any of this information. You may phone us prior to your appointment to speak to a radiologist or you may ask questions on the day of your appointment. Feel free to discuss the information with your own doctor.

#### *“Respect, communication, involvement”*

The staff in Diagnostic Imaging want to make sure that you have understood the information that we have provided personally, as well as the information contained in the information sheet. We believe your understanding about why and how we are planning to assist you is very important.