

## INFORMATION FOR PATIENTS

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# Lung biopsy

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We hope the following information about having a lung biopsy will be of help to you. This leaflet will help you understand what is involved.

### Introduction

An abnormality has been found on your recent CT scan requiring us to take a small sample of tissue (biopsy) from the area. Following discussion with an x-ray doctor (radiologist), your doctor has decided that the best way of obtaining this tissue is to do a lung biopsy. This will take place in the x-ray department, usually on the CT scanner.

The biopsy obtained will be analysed in the pathology department and will help your doctor to confirm a diagnosis and discuss treatment with you. Your doctor will usually ask you to sign a consent form when the biopsy is arranged.

An appointment time will be arranged with you. In some cases, the procedure may require an overnight stay in hospital afterwards. You should bring appropriate clothes and toiletries.

### How do I prepare for the biopsy?

Please let your doctor or the endoscopy staff know if you have diabetes or are taking warfarin.

This will need to be discontinued for five days before the procedure. Clopidogrel, Prasugrel and Ticagrelor will need to be stopped for seven days. Rivaroxaban, apixaban or edoxaban tablets will need to be discontinued for 48 hours. Enoxaparin or fondaparinux injections will need to be discontinued for 24 hours.

On the day of the biopsy, you will be collected from the Medical Day Case Unit and taken to the x-ray department examination room.

The radiologist will explain the biopsy procedure to you again. They will confirm you understand and agree to it. You will have already signed a consent form.

### What happens during the biopsy?

The radiologist will use the CT or occasionally the ultrasound scanner, to guide the biopsy needle. The type of image guidance used will depend on the site of the abnormal area. If the abnormality is closer to the back than the front, you may be asked to lie on your tummy for the procedure.

Using the CT or ultrasound scanner for guidance, a small marker will be placed on the skin to identify the site at which the sample will be taken. The skin is cleaned to reduce the risk of infection.

An injection of local anaesthetic will be given at this site to ensure the remainder of the procedure is as painless as possible.

A needle is passed between the ribs into the required area. You may be asked to hold your breath. Normally a few samples are taken. You will hear a loud click as the sample is taken. The duration of the procedure can vary between 15 minutes and an hour.

Once the test is completed, you may be taken to another room to have a chest x-ray. This will be reviewed by the radiologist. Some patients are managed in the department and discharged after an hour. Others are taken on their bed back to the ward to rest quietly for the next few hours.

We will monitor you to ensure all is well and a further chest x-ray will probably be arranged later in the day.

If all is well, you may be able to go home later that day. The ward doctor will make these arrangements with you.

### **Are there any risks from the procedure?**

You will have had blood and lung function tests before the procedure is arranged to ensure that the risk of complications is kept to a minimum. The main complications are:

- **Pneumothorax**

A small amount of air often leaks out around the lung when the needle is removed.

This may cause slight discomfort on deep breathing in the following 24 hours. Your stay in hospital is to ensure this is not troublesome. This may happen in around 1 in 5 procedures.

In rare cases, a tube may need to be inserted into the chest to allow the lung to re-expand. This will result in a longer hospital stay. This may happen in 3 out of 100 procedures. Sometimes it is necessary to do this immediately after the biopsy, and sometimes later in the day.

- **Bleeding**

You may notice a small amount of blood when you cough after the procedure. This rarely requires any treatment and usually stops without action. If you start to cough more blood, you should contact your GP or attend your nearest Emergency Department.

In a small proportion of patients, the test doesn't give a diagnosis (around 1 in 10).

Rarely this procedure has been known to cause death (risk: 1 in 1000). This risk is generally lower if you are otherwise healthy. We do approximately 50 biopsies a year at King's Mill Hospital, which means on average one death would occur every 20 years.

### **Will there be any side effects after the biopsy?**

Most people have no problems but if you suddenly become breathless or have severe chest pain, this may mean there has been an air leak (a pneumothorax).

You should attend your nearest Emergency Department straight away and tell them you have had a lung biopsy. They will arrange another x-ray of your chest.

### **Can I drive after the biopsy?**

Someone else must drive you home after the test.

### **Your procedure**

**Day:**

**Date:**

**Time of arrival:**

**Approximate time of test:**

### **Contact details**

If you have any questions about the test, please contact your lung clinical nurse specialist at the hospital on telephone 01623 622515, extension 3896 or 3332.

### **Further sources of information**

NHS Choices: [www.nhs.uk/conditions](http://www.nhs.uk/conditions)

Our website: [www.sfh-tr.nhs.uk](http://www.sfh-tr.nhs.uk)

### **Patient Experience Team (PET)**

PET is available to help with any of your compliments, concerns or complaints, and will ensure a prompt and efficient service.

**King's Mill Hospital:** 01623 672222

**Newark Hospital:** 01636 685692

**Email:** [sfh-tr.PET@nhs.net](mailto:sfh-tr.PET@nhs.net)

If you would like this information in an alternative format, for example large print or easy read, or if you need help with communicating with us, for example because you use British Sign Language, please let us know.

You can call the Patient Experience Team on 01623 672222 or email [sfh-tr.PET@nhs.net](mailto:sfh-tr.PET@nhs.net).

This document is intended for information purposes only and should not replace advice that your relevant health professional would give you.

External websites may be referred to in specific cases. Any external websites are provided for your information and convenience. We cannot accept responsibility for the information found on them.

If you require a full list of references for this leaflet, please email [sfh-tr.patientinformation@nhs.net](mailto:sfh-tr.patientinformation@nhs.net) or telephone 01623 622515, extension 6927.

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