



CT guided biopsy of the lung

What is a CT guided biopsy of the lung?

You have been advised to have a needle biopsy of lung tissue to try to identify the cause of an abnormal area of lung tissue on your CT scan of the chest. This test will be undertaken in the imaging department (radiology) of the hospital using a CT scan to guide the procedure. It will be done by a specialist called a Radiologist.

You will have a pre-assessment appointment with a radiology nurse a few days before your biopsy. The nurse will explain things to you and will take routine screening samples and may take a blood test.

Before the procedure, the radiologist will go through the procedure with you and will be happy to answer any questions you may have. You will then be asked to sign a consent form stating that you understand the nature and purpose of the procedure and that you are happy to carry on with it.

You will have a local anaesthetic injection at the site of the procedure to make the area numb.

When the area is numb, the radiologist will pass a small needle between the ribs. This needle will then pass into the lung, guided by a CT scan and a small piece of tissue will be sampled.

Two or sometimes three biopsies may be required to obtain an adequate specimen. The entire procedure will last up to about an hour.

What are the possible side effects and complications of a CT guided biopsy of the lung?

It is necessary to lie still in the CT scanner whilst the procedure is undertaken and it may be necessary to lie at an angle. Some people may find this uncomfortable. Please take any regular painkillers you are on and bring with you any that you take 'when needed'.

A CT guided biopsy of the lung is usually a safe procedure unless you have got severe lung disease, such as chronic bronchitis or emphysema. If this is the case, the additional risks will be explained to you.

Sometimes people cough up some blood after the procedure and it is possible to have some bleeding at the biopsy site. Serious bleeding is uncommon.

It is possible to have a small leakage of air inside the chest (called a pneumothorax) following the procedure. For this reason you will have a chest x-ray about 1-2 hours after the procedure.

If no leakage is detected you will then be discharged. If a small leakage of air is detected we may ask you to stay in hospital overnight in order to repeat the chest x-ray in the morning to ensure the leakage has stopped. The leakage is often very small and rarely requires intervention. A large pneumothorax is rare but it can be treated by putting a small plastic drain in between two ribs. This may mean you need to stay in hospital for a day or two.

When will I get the result of the CT guided biopsy of the lung?

Your own Consultant or Specialist Nurse will arrange to see you with the result of the biopsy, usually about a week to ten days after the procedure.

After the CT guided lung biopsy

Once you have been discharged, if you feel significantly more short of breath than usual anytime in the first 24 hours after the procedure, you are advised to attend Accident and Emergency (A & E) to be assessed. It is rare for this to happen but it is important to seek help if it does.

As previously mentioned, you may cough up some blood or have some bleeding at the place where the biopsy was taken. Do not worry if this happens, but seek help if it does not stop by itself.

Questions

If you have any questions about the biopsy please ask your Consultant, the Radiologist who does the biopsy, the radiology nurses or your specialist nurse.