

Information for patients having a CT Guided Biopsy

Why do I need to have a biopsy taken?

Other tests you have had have shown an abnormal area. From these tests it is not always possible to say what the abnormality is. The simplest way to find out is to take a small sample of tissue (biopsy) from the area in question using a special needle and then examine it closely under a microscope.

Who will do the biopsy and where will it be done?

The biopsy sample will be taken by a doctor who specialises in using x-ray and scanning equipment and interpreting X-rays (Radiologist). The biopsy will be done using a CT scanner in the Xray department.

What do I need to do to prepare for the biopsy?

You will be admitted to the day surgery ward at Heartlands hospital or the day procedures unit at Solihull hospital. At Good Hope Hospital you will go to the Recovery unit in xray after your biopsy. If you are on Warfarin or Aspirin a blood test will have been taken to check that you do not have an increased risk of bleeding. If you have not already been asked to stop taking this medicine prior to your appointment then please ring this department for direction.

When the results of the blood test are ready you will be taken to the x-ray department. The radiologist will explain the procedure to you and ask you to sign a consent form giving your permission for the biopsy to be taken. You should tell the radiologist if you have any allergies and if you are on Warfarin. If you have any concerns or questions about the procedure please ask the radiologist at this time.

What happens during a CT guided biopsy?

First you will need to get undressed and put on a hospital gown. You may wish to bring your own dressing gown with you if you prefer. You will then be asked to lie on the CT scanner table. You will be asked to either lie on your back or front depending on where the radiologist is going to take the biopsy from. The radiologist then uses the CT scanner to decide on a suitable point to take the sample from and marks this point on your skin with a pen. The radiologist will keep everything clean and will be wearing sterile gloves and a gown. The chosen area on your skin will be cleaned with antiseptic and the area will be covered with a sterile towel. Next the radiologist will anaesthetise this area with a local anaesthetic. Several scans will be taken to double check that the correct area has been marked and the biopsy needle is inserted. The radiologist will sometimes need to take several samples from the same area to make sure they have taken enough tissue for analysis. Finally another scan is taken to check for any possible complications.

Will it hurt?

Most biopsies do not hurt. When the local anaesthetic is injected it stings a little to start with but then the area should become numb. Later when the biopsy needle is inserted you may feel a sensation of something passing into your body but it is generally so quick that it is not very uncomfortable at all. When the biopsy is taken the needle that is used makes a sharp snapping sound but this is nothing to be alarmed about.

How long will it take?

Usually it takes about 20 to 30 minutes from start to finish. You will need to lie still during the time on the CT scanner table.

Are there any risks?

CT guided biopsy is a very safe procedure but there are a few risks and complications that can arise as with any medical procedure. There is a risk of bleeding but this depends on which part of the body the tissue sample is taken. There is a risk of a leak from the bowel but this depends on which part of the body the tissue sample is taken. The radiologist will explain the risks before the examination.

If you having having a CT lung biopsy the main risk is of causing an air leak into the space between the lung and the inner chest wall (pneumothorax). A small air leak after a lung biopsy is fairly common. Most air leaks do not cause any problems and get better on their own. Sometimes though a large air leak occurs and then the air will need to be drained either with a needle or by putting a small tube through the skin. The other risk is of coughing up blood. This can happen because the needle caused some bleeding to occur in your lung. If you are coughing up a lot of blood you will need to stay in hospital for observation until it clears. If you start coughing up a lot of blood when you have gone home you will need to come back to hospital.

What happens afterwards?

After the procedure you will go back to the ward/unit and the nurses will perform routine checks on your pulse and blood pressure to make sure that there are no problems. Usually you will need to stay on the ward for about 3 to 4 hours after the biopsy.

If you have had a CT lung biopsy then before you go home you will have a chest x-ray to check for any air leaks.

When will I get my results?

The doctor who saw you in clinic will arrange an appointment for you to come back to discuss the results of your biopsy. Unfortunately not all biopsies are successful. This may be because despite taking every possible care the piece of tissue taken may be too small to make a diagnosis.

Sometimes even with a good sample of tissue it is not possible to make a definite diagnosis. If this is the case your doctor will be able to discuss the next course of action with you.