

Information about having a

Percutaneous Renal (Kidney) Biopsy



What is a Percutaneous Renal (Kidney) Biopsy?

Percutaneous means “through the skin”. A biopsy is a method of using a needle to take a small piece of tissue from an organ in the body, such as the kidney.

We put a special needle through a small cut in the skin overlying the kidney to remove a small piece of tissue. Then we send the sample of kidney tissue to the Pathology lab for examination under the microscope.

Who will do it?

A specially trained doctor called a Radiologist will take the tissue.

Where will it be done?

In the CT room, in the Radiology Department (x-ray).

When can I discuss the procedure?

You can discuss this with the ward doctor, at the clinic and with the Radiologist before the procedure.

Consent

We will ask you to sign a consent form before the procedure to give us permission to do the biopsy. Please make sure that you ask any questions that you may have. This is to make sure that you know what we plan to do, other treatments, and any risks or complications of the biopsy.

What preparation is required before the procedure?

We will need to take routine blood tests. Please tell the doctor if you take any medicines to thin the blood (anti-coagulants) as you may have to be stop or adjust these temporarily. Examples include warfarin and clopidogrel (Plavix).

You cannot eat for 4 hours before the procedure but you may be allowed to drink small amounts of water. You will need to wear a hospital gown.

What happens during the procedure?

You will have an initial CT scan to help plan the procedure. We will ask you to lie on a table. It is important that you lie still throughout the procedure. The Radiologist will clean the skin with antiseptic solution and inject local anaesthetic. This will sting briefly before the tissues go numb. We will make a small cut in the skin and insert the biopsy needle to take the tissue sample. The Radiologist will use the CT scanner to accurately guide the needle into the correct position to take the biopsy. The table will move in and out of the CT scanner several times. The Radiologist will give you breathing instructions during the procedure, At times you will need to hold your breath for a few seconds.

Will I have any discomfort?

There is a brief stinging sensation when the Radiologist injects the local anaesthetic. After this the tissues will go numb. Although you will be aware of the Radiologist working, it shouldn't be painful. There may be some mild discomfort after the procedure but simple painkillers such as paracetamol should help.

How long will it take?

The procedure itself takes about 20-30 minutes but you will be in the Radiology Department for longer to allow time to speak to the radiologist and other staff before the procedure.

What happens afterwards?

You will return to your ward and the nursing staff will regularly check your pulse and blood pressure. You will need to stay in bed for approximately 4 hours. You may need to stay in the hospital overnight after the procedure.

Are there any risks?

Percutaneous renal biopsy is a safe procedure but as with any medical procedure there are some complications that can arise.

There is a small risk of bleeding from the kidney as a result of the biopsy. This usually settles down by itself. Occasionally the bleeding can be more severe and this may need a procedure to control it. This would also be carried out in the Radiology Department. Rarely, surgery may be required.

If the area to be biopsied lies at the top of the kidney there is a small risk that the needle may cross the base of the lung. If this happens there is a risk of developing a collapsed lung (pneumothorax). A small pneumothorax will resolve itself. A larger pneumothorax may need a chest drain and admission to hospital. A chest drain is a slim tube which is inserted between the ribs to help re-inflate the lung.

If you have any questions please telephone the number on your appointment card or letter.