

Patient information

Native Kidney Biopsy

Nephrology Department

What is a native kidney biopsy?

A Native kidney biopsy means removing a very small sample (a few millimetres) from one of your kidneys using a special needle. The sample is examined under a microscope and various tests can be carried out on it.

What are the benefits of having a native kidney biopsy?

This may be the only way doctors can find out the exact cause of your kidney problems and decide on the best treatment for you.

Are there any special preparations?

You may be asked to come to 4X Day ward about a week before your procedure for pre-clerking. This involves a physical examination, answering some health-related questions and having swabs taken to check for MRSA. You may need to have a chest X-ray or ECG at this time. If you are not asked to attend for pre-clerking, you will have MRSA swabs taken when you are admitted.

You will be admitted to the hospital, (usually the day ward) on the day of your biopsy. A nurse will take blood samples and check your temperature, pulse and blood pressure. You will also be asked to provide a urine sample.

You will normally be able to wear your own clothes. Leggings, jogging pants and a T Shirt for your own comfort are recommended. Very rarely you will need to wear a hospital gown.

You will be able to eat and drink as usual because a local anaesthetic is used for the biopsy.

You may be given a small dose of a sedative tablet to help you relax.

It is very important that you tell your doctor well in advance if you are taking any medicines which can affect bleeding.

These include Warfarin, Aspirin, Clopidogrel and Persantin Apixaban or similar blood thinning tablets. Medicines such as these may need to be stopped for one to two weeks before the biopsy. Your hospital doctor/specialist nurse will advise you about this.

Sometimes biopsies have to be cancelled because your blood pressure is a bit high, or blood results are not within certain limits. If this is the case the doctor may alter your medication and reschedule the biopsy.

Before the biopsy the hospital doctor/specialist nurse will speak to you about the procedure to make sure you understand all the risks and benefits and you will be asked to sign a consent form.

Let the doctor know if you suffer from asthma, bronchitis or other chest problems, or suffer from panic attacks, claustrophobia, back or joint problems or any condition which you think may affect the procedure.

Where is the biopsy done?

The biopsy is done in a special procedure room on one of the wards or in the X-ray Department. You will be asked to lie face down on a bed or couch with a pillow under your stomach. The lights may be dimmed so the ultrasound device which is used to find your kidney shows the image of your kidney clearly.

How is it done?

Your kidneys lie just under the ribcage towards the side and back of your abdomen. The exact location of the kidney is found using an ultrasound machine. This is not painful at all.

The skin on your back over your kidney will be cleaned with an antiseptic solution. Let the doctor know if you think you may be allergic to any antiseptics. Local anaesthetic is injected into your skin. This may sting at first but your skin soon becomes numb.

Local anaesthesia is drug induced numbness: it may be provided by an Anaesthetist, Surgeon or other healthcare professional, depending on the technique used.

Like all medicines, local anaesthetics may sometimes cause side-effects as well as the effects that are needed. You may experience dizziness, blurred vision, drowsiness and occasionally, loss of consciousness.

Serious side-effects are rare, and include fits, low blood pressure, slowed breathing and changes in heartbeat, which may be life-threatening. If you have any concerns about any of these effects, you should discuss them with your doctor.

A special hollow biopsy needle is then inserted through the numb area of skin. The doctor / nurse specialist will ask you to hold your breath for a few seconds while the biopsy needle is then passed into your kidney to get a biopsy sample of the Kidney. You should not feel any pain from the biopsy needle but you may feel some pressure and hear a clicking sound when the biopsy sample is taken. The doctor/ nurse specialist may need to take three or four biopsy samples of kidney to get enough tissue to examine.

Occasionally it is not possible to get a suitable sample of your kidney. Your doctor will discuss this with you should it happen.

After a native kidney biopsy

A firm dressing pad is applied to the biopsy skin area and you will need to lie flat in bed for four hours after the procedure. After four hours you may sit up in bed but you will need to remain in bed for a total of six hours. Your doctor or nurse will advise you when it is appropriate for you to get out of bed.

During this time your temperature, pulse, blood pressure and biopsy skin site will be checked by a nurse. At first this will be every 15 minutes but gradually the frequency of checks will get less.

If you need to use the toilet during this time of bed-rest you will be given assistance to use a urinal (bottle) or bed-pan. Simple painkillers such as Paracetamol can be given for any discomfort.

Providing there are no problems you will usually be allowed home after six hours. A small dressing will be applied to the biopsy skin area which should be left undisturbed for several days.

You should not do any heavy lifting or strenuous exercise for at least a week after your biopsy. If your job involves either of the above, you should take a week off work.

What are the risks?

The risk of a serious complication is small. The main risk is that the biopsy needle may damage the kidney or other parts of the body nearby. Bleeding is the most serious complication. This is why blood tests are done before the biopsy to make sure your blood clots normally and why "blood thinning" medications are stopped.

Common Risk (1 in 50 to 1 in 100) A possibility of passing blood stained urine for approximately 24 to 48 hours post procedure which could lead to requiring a blood transfusion.

Occasional (1 in 1500) A possibility of requiring a procedure in the X-ray department to stop any bleeding from within the kidney.

Infection, procedure done under sterile conditions.

Rare (1 in 3000 to 1 in 5000). A requirement to go to operating theatre for removal of kidney due to uncontrollable bleeding. This would become life threatening to the individual.

A risk of injury to nearby structures surrounding the kidney ie blood vessels/other organs. But because procedure is carried out under ultrasound guidance, this would be unlikely.

If any of these risks occur you may be kept in hospital for more than 24 hours.

Post native kidney biopsy. If you experience any of the below problems please contact Tel: 0151 706 2000 Ext 2365 Text phone number: 18001 0151 706 2000 Ext 2365 (Ward 6A)

- Blood in your urine more than 24 hours after the biopsy.
- You are unable to pass urine.
- You have a fever or a high temperature.
- Worsening pain at the biopsy site.
- Faintness or dizziness.

Feedback

Your feedback is important to us and helps us influence care in the future.

Following your discharge from hospital or attendance at your outpatient appointment you will receive a text asking if you would recommend our service to others. Please take the time to text back, you will not be charged for the text and can opt out at any point. Your co-operation is greatly appreciated.

Further Information

Who to contact:

Royal Liverpool University Hospital:

Tel: 0151 706 2000

Text phone number: 18001 0151 706 2000

Medical Day case ward

Tel: 0151 706 2396

Text phone number: 18001 0151 706 2396

Renal Ward 6A Tel: 0151 706 2363

Text phone number: 18001 0151 706 2363

Merseyside Kidney Patients

Support Group are available for support and advice on living with kidney disease

Tel: 07743 281113 or 07746570116 for further information

Websites

www.patient.co.uk

www.kidney.org.uk

Author: Nephrology Department

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All Trust approved information is available on request in alternative formats, including other languages, easy read, large print, audio, Braille, moon and electronically.

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