

Having a sample of tissue taken from your kidney (kidney biopsy)

Department of Radiology

Information for Patients

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Introduction

If you are an outpatient please read your appointment letter carefully to check which hospital your appointment is at.

This leaflet tells you about your examination. Please read it carefully as it has important information and instructions.

You will have received 2 appointments with this leaflet.

- Your first appointment is a pre-assessment meeting. Please bring a list of your medicines with you to the pre-assessment meeting. At this meeting you will have some tests including an up-to-date blood test. This will make sure everything is suitable and ready for your biopsy.
- The next appointment is on a different day. It is for your biopsy procedure.

After reading this leaflet, if you have any questions, write them down. You can ask them when you come to the pre-assessment meeting.

What is a kidney (renal) biopsy?

A kidney or renal biopsy means removing a very small sample of tissue (about half a matchstick in size) from one of your kidneys using a special needle.

The sample can then be tested under a microscope to find out the cause of your kidney disease or abnormality shown in the earlier scans.

**Health information and support is available at www.nhs.uk
or call 111 for non-emergency medical advice**

Visit www.leicestershospitals.nhs.uk for maps and information about visiting Leicester's Hospitals
To give feedback about this information sheet, contact InformationForPatients@uhl-tr.nhs.uk

Why do I need a kidney biopsy?

You may have had scans that have shown an area of tissue in your kidney that may be abnormal. Or, other tests may have shown that the kidney is not working properly.

From the scans, it is not always possible to say exactly what the abnormality is.

The simplest way of finding out is by taking a tiny sample of the kidney for a pathologist (an expert in making a diagnosis from tissue samples) to examine.

The results of the biopsy usually give the doctors the information needed to help decide how to treat or manage your condition.

Important information

If you are taking medication that thins the blood (anticoagulants or antiplatelets) it may need to be stopped or replaced with a different one for a few days.

Please call the radiology department for advice as soon as possible. The phone number to call is on your appointment letter and at the end of this leaflet. You will be asked what blood thinning medicine you are taking, how much you take (the dose), and what you are taking it for.

Common examples of these drugs include aspirin, warfarin, clopidogrel (Plavix®), apixiban (Eliquis), rivaroxaban (Xarelto), ticagrelor (Brilinta).

Please also tell us if you are taking any non-steroidal anti inflammatory pain killers. Normally these will need to be stopped several days before the procedure.

You will be told when to stop taking these medicines at your pre-assessment appointment.

Important information

When you arrive for the procedure, please tell the doctor who is doing the procedure if:

- You have diabetes
- You are allergic to rubber (latex), have any other allergies or have asthma.
- There is any possibility that you may be pregnant.
- You have any problems with easy bleeding or bruising.

Information for patients with diabetes

If you have diabetes it is important to have a normal breakfast. You may need to adjust your medication.

Do not eat anything for 4 hours before the biopsy. You may drink small sips of water.

Please contact your normal diabetes care provider to discuss this as soon as you get this appointment.

How do I get ready for the procedure?

Eating and drinking instructions:

- Do not eat anything for 4 hours before the biopsy.
- You may drink small sips of water.



Staying in hospital:

Many biopsy procedures can be done as a day-case, so you go home the same day. Some patients will need to stay overnight as an inpatient in the hospital. This will depend on your health and home circumstances. We will talk to you about what is most suitable for you.

At the hospital:

Before the biopsy, a thin needle called a cannula will be put into a vein in your arm. This is either on the ward or when you arrive for your biopsy. This is so that you can be given medication if needed.

You will also be asked to take off some of your clothes and put on a hospital gown.

What happens during the procedure?

- The biopsy will usually be done in Radiology in either an ultrasound, CT or special procedures room.
- You will be awake for the biopsy procedure.
- You will be asked to lie on the X-ray or scanning table in the position that the radiologist has decided is most suitable. It is important that you stay very still in this position until the procedure is over. If you are uncomfortable please let the doctor know.
- Everything will be kept clean (sterile). Your skin will be cleaned with antiseptic. This may feel cold. You will have some of your body covered with sterile sheets.
- An ultrasound machine or the CT scanner will be used to decide on the best place for putting in the biopsy needle. The radiologist will look at the scan images whilst doing the biopsy to check that the needle is placed as accurately as possible.
- Your skin and the surrounding tissue over the kidney will be numbed with local anaesthetic. When the local anaesthetic is injected it will sting to start with, but this soon wears off. The skin and deeper tissues should then feel numb. If the procedure does become uncomfortable you should tell the member of staff who will be with you throughout the procedure.
- The biopsy needle will be passed through the numbed area and into the kidney.
- The kidneys move during breathing so you may be asked to stop breathing (hold your breath) for a few seconds as the sample is taken. When the biopsy is taken it should not hurt but you may feel a little pressure and hear a clicking sound. The doctor may ask to take 2 or 3 biopsy samples. Sometimes, it may not be possible to take a suitable sample.
- The first part of the procedure when the equipment is being prepared may seem to take a while but doing the biopsy itself does not take very long at all. It takes about 30 minutes for the whole procedure.

What happens after the procedure?

- You will be asked to rest in bed for up to 6 hours. Nurses will carry out routine checks, such as taking your pulse and blood pressure. This is to make sure that there are no problems.
- You can eat normally after about 2 hours. You will usually be encouraged to drink plenty of fluids.
- When the local anaesthetic wears off, you may feel some pain in your back due to slight bruising. You can be given a mild painkiller for this.
- If you are blood thinners you should have stopped taking them before the procedure. The doctor doing the procedure will tell you when you can start taking them again.
- Most patients go home after 6 hours.
- **You will need someone to drive you home.**
- **Do not drive after the procedure until the next day.**
- **Do not take any strenuous exercise or heavy lifting for 24 hours after the procedure.**

How do I get the results?

The results cannot be given to you right away. You will be told how to get your results after the biopsy.

What are the risks and complications of having a kidney biopsy?

The risk of serious complication is small.

As with any procedure or operation, complications are possible. We have included the most common risks and complications in this leaflet. The possibility of these happening is different for each person. We will talk to you about your risks before you sign the consent form.

Damage to the kidney: The main risk is that the biopsy needle can damage the kidney or other parts of the body nearby. Your doctor thinks a kidney biopsy is worth the small risks for the information it gives. It is important that you agree with this before you sign the consent form.

Bleeding: Bleeding is the most serious complication. You will have a blood test before the biopsy to make sure your blood clots normally.

- In about 1 in 10 biopsies, there is visible bleeding in your pee (urine) that settles by itself.
- In less than 1 in 50 biopsies, there is more bleeding that will need a blood transfusion.
- In less than 1 in 1500 biopsies, the bleeding may not stop without treatment. This may need urgent X-ray tests or even an operation to stop the bleeding.
- In less than 1 in 3000 biopsies, the kidney may have to be taken out to stop the bleeding.
- Although deaths have occurred following complications of biopsies, this is rare.
- A bruise may develop around the kidney or rarely there may be damage to another organ.

What are the benefits of having a kidney biopsy?

A biopsy could help to find out what is wrong with your kidneys and decide about the correct treatment.

Asking for your permission (consent)

The doctor who referred you should have talked to you about the reasons for this procedure and any other options.

You have been referred to a hospital doctor or a doctor who specialises in imaging and X-ray treatments (a radiologist) for this procedure. They will confirm that you understand:

- why the procedure is being done,
- the potential risks
- the chances of success

You will sign a consent form to confirm this. **You should feel that you have had enough explanation before you sign the consent form.**

If after talking to the hospital doctor or radiologist you do not want to have the procedure then you can decide against it at any time.

If the radiologist feels that your condition has changed they will talk to you about whether the procedure is still needed. They may then ask you to return to your referring doctor for review.

If you feel during the procedure that you do not want it to continue we will explain the implications of not doing so to help you fully decide.

Are all biopsies successful?

- For most kidney biopsies, the doctors can get a diagnosis from the biopsy sample.
- Not all biopsies are successful.
- A kidney biopsy is less likely to be successful if the abnormal area is small. This may be because the piece of tissue has been taken from normal tissue rather than the abnormal tissue.
- The amount of abnormal tissue taken may not be enough for the pathologist to make a diagnosis.
- The radiologist doing your biopsy may be able to give you some idea as to the chance of getting a good sample.
- If your biopsy does not give the information needed, the doctor who wanted you to have the biopsy will talk to you. They will talk about what happens next and how to manage your condition. They may decide with you to have the biopsy done again.

Are there alternatives to a kidney biopsy?

A biopsy is usually the last test to be done to work out what is wrong with your kidneys because the other tests have not provided the answer. Without a biopsy, your doctor may not be able to advise the best treatment for you.

What if I need to talk to someone?



If you have any questions or concerns, or cannot make the appointment please call the radiology department on **0116 258 8765** and select **option 7**. Monday to Friday 9am to 5pm, excluding bank holidays.

Any questions?

If you have any questions you can write them down. This is to remind you to ask when you come for your appointment.

اگر آپ کو یہ معلومات کسی اور زبان میں درکار ہیں، تو براہ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔
على هذه المعلومات بلغة أخرى، الرجاء الاتصال على رقم الهاتف الذي يظهر في الأسفل
જો તમને અન્ય ભાષામાં આ માહિતી જોઈતી હોય, તો નીચે આપેલ નંબર પર કૃપા કરી ટેલિફોન કરો

જે કુર્મીં ઇચ જાદવારી કિમે હેર ડામ્મા દિચ ચાહુંદે હે, ડાં વિરખા વરહે હેઠાં દિંડે ગદે નંબર '૩૯ ટેલીફોન વરે।
Aby uzyskać informacje w innym języku, proszę zadzwonić pod podany niżej numer telefonu

Previous reference:

If you would like this information in another language or format such as EasyRead or Braille, please telephone 0116 250 2959 or email equality@uhl-tr.nhs.uk