

Having a kidney biopsy in the Renal Unit

Your doctor has referred you to have a kidney biopsy. They will have spoken to you about the test and the following information will supplement the information you have been given verbally. This leaflet aims to answer your questions about having a kidney biopsy. It explains the benefits, risks and alternatives, as well as what you can expect when you come to hospital. If you have any further questions, please speak to a doctor or nurse caring for you.

What is a kidney biopsy?

This involves taking a few small pieces of kidney tissue, either from your own kidney (native kidney biopsy) or a transplanted kidney. This tissue is then looked at under a microscope, often after the tissue has been stained with special dyes which show up areas of interest.

A kidney biopsy is usually done under local anaesthetic. For more information please ask for a copy of our leaflet **Having an anaesthetic**

Why do I need a kidney biopsy?

The main reasons for carrying out a kidney biopsy is when blood or urine tests have shown that your kidneys (or transplanted kidney) are not working normally and there is no obvious explanation. A kidney biopsy may also be carried out when the kidneys are working but are leaking protein and/or blood, which is detected in the urine. The biopsy will help your doctor diagnose what is wrong with your kidneys and decide on the best treatment for you. In some cases treatment may not be available or necessary, but the biopsy will still give your doctor a clearer picture of what is likely to happen to your kidneys and health in the future.

Do I need to do anything to prepare for the biopsy?

If you are being admitted to a ward, you may need to phone and check if a bed is available. You can eat and drink normally.

If you take aspirin, you should stop taking it one week before the biopsy. If you are taking any medicines that thin your blood, such as antiplatelet medicines (for example clopidogrel) or anticoagulant medicines (for examples warfarin or rivaroxaban), please make sure your doctor knows and has told you when to stop taking them and when to restart them after the procedure. Please also let your doctor know if you have any allergies to medicines, especially to local anaesthetics or solutions used to clean the skin before an operation.

Giving my consent (permission)

We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves. If you would like more information about our consent process please ask a member of staff caring for you.

Where will the biopsy be carried out?

You will be asked to come to the kidney ward on the morning of the biopsy. The biopsy will be carried out in a special room attached to the ward. Occasionally the biopsy may be carried out in the x-ray department.

What happens during the kidney biopsy?

Most biopsies take place on Patience Ward, 5th floor, Borough Wing, Guy's Hospital. Blood tests will have been done when you attended the clinic to discuss having a biopsy but sometimes may need to be repeated on the day of the biopsy. A small plastic tube (cannula) will be inserted into a vein in your arm.

If you are having a biopsy of one of your own kidneys, you will be asked to lie on your front. An ultrasound machine will be used to locate your kidneys and find the best place to obtain the tissue samples from. This is usually the lower part of the left kidney. Samples are only taken from one kidney. The skin above the kidney is cleaned using an antiseptic solution. Local anaesthetic is then injected into the skin above the kidney through a fine needle, and then deeper tissue down to the kidney. This may sting but the area will then become numb. You will remain fully awake during the procedure.

A special larger needle is then inserted through the skin into the outer part of the kidney. A small piece of the kidney is then obtained through this needle. Just before the piece of tissue is obtained you might be asked to take some deep breaths and hold your breath for a few seconds. As the biopsy is being taken, you will hear a click. The sample will then be looked at under a microscope to see how much kidney tissue has been obtained. A minimum of two pieces are needed to provide the required information, so the needle is usually reinserted a number of times (usually up to a maximum of six times). Once the biopsy has been completed you will be asked to turn onto your back.

If you are having a biopsy of a transplanted kidney, the procedure is the same except that you will be asked to lie on your back and the biopsy is taken from your front.

How long does the kidney biopsy take?

The procedure takes about half an hour.

What are the risks?

The amount of tissue removed is very small and will not affect your kidney function. The main risk of the procedure is bleeding. About one in every 10 people will have visible blood in the urine after a kidney biopsy. However, most bleeding will stop on its own. If there is visible blood in the urine, you might be asked to stay overnight until this settles. If you are passing a lot of blood in the urine, you may need a catheter to stop blood clots forming in the bladder. On average, a blood transfusion might be needed in up to one in 25 patients.

Less than one in 200 patients will need a further procedure, usually a special x-ray called an angiogram to control the bleeding. Very rarely (less than one in 1000 patients) removal of the kidney may be necessary with an operation. These risks vary from patient to patient and depend on a number of different factors. Your doctor will discuss your individual risks when they discuss the procedure with you.

Is there an alternative?

There is no other test that will give the same information.

What happens after the procedure?

You will need to lie on your back for a minimum of four to six hours. During this time your pulse and blood pressure will be checked regularly. As the local anaesthetic wears off, you may notice some discomfort in your back. You can ask for painkillers to help with the discomfort.

As long as your pulse and blood pressure remain stable, you are not suffering too much discomfort and you have successfully passed clear urine, you can go home on the same day.

What happens after I leave hospital?

Please arrange for a friend or relative to travel home with you, ideally this should be in a car and not on public transport. Ideally you should have someone stay with you overnight.

- You should rest for the remainder of the day.
- You can take painkillers if you feel any discomfort.
- Avoid heavy lifting, strenuous exercise and contact sports for at least one week.

Call Patience Ward on 020 7188 8838 urgently if you:

- experience worsening pain in the area where you had the biopsy
- notice blood or blood clots in your urine
- develop a fever (temperature above 37⁰C)
- feel faint or dizzy.

If you feel very unwell, please go to your nearest A&E department

Will I have a follow-up appointment?

You should have an appointment in the kidney clinic to discuss the results within a month of having the biopsy. Please contact the ward if you did not receive one. You may be contacted to come earlier once the results become available.

Useful contact details

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

t: 020 7188 8801 (PALS) **e:** pals@gstt.nhs.uk

t: 020 7188 3514 (complaints) **e:** complaints2@gstt.nhs.uk

Language and Accessible Support Services

If you need an interpreter or information about your care in a different language or format, please get in touch:

t: 020 7188 8815 **e:** languagesupport@gstt.nhs.uk

NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

t: 111

NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

w: www.nhs.uk

Get involved and have your say: become a member of the Trust

Members of Guy's and St Thomas' NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, and to become a member:

t: 0800 731 0319 **e:** members@gstt.nhs.uk **w:** www.guysandstthomas.nhs.uk/membership

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