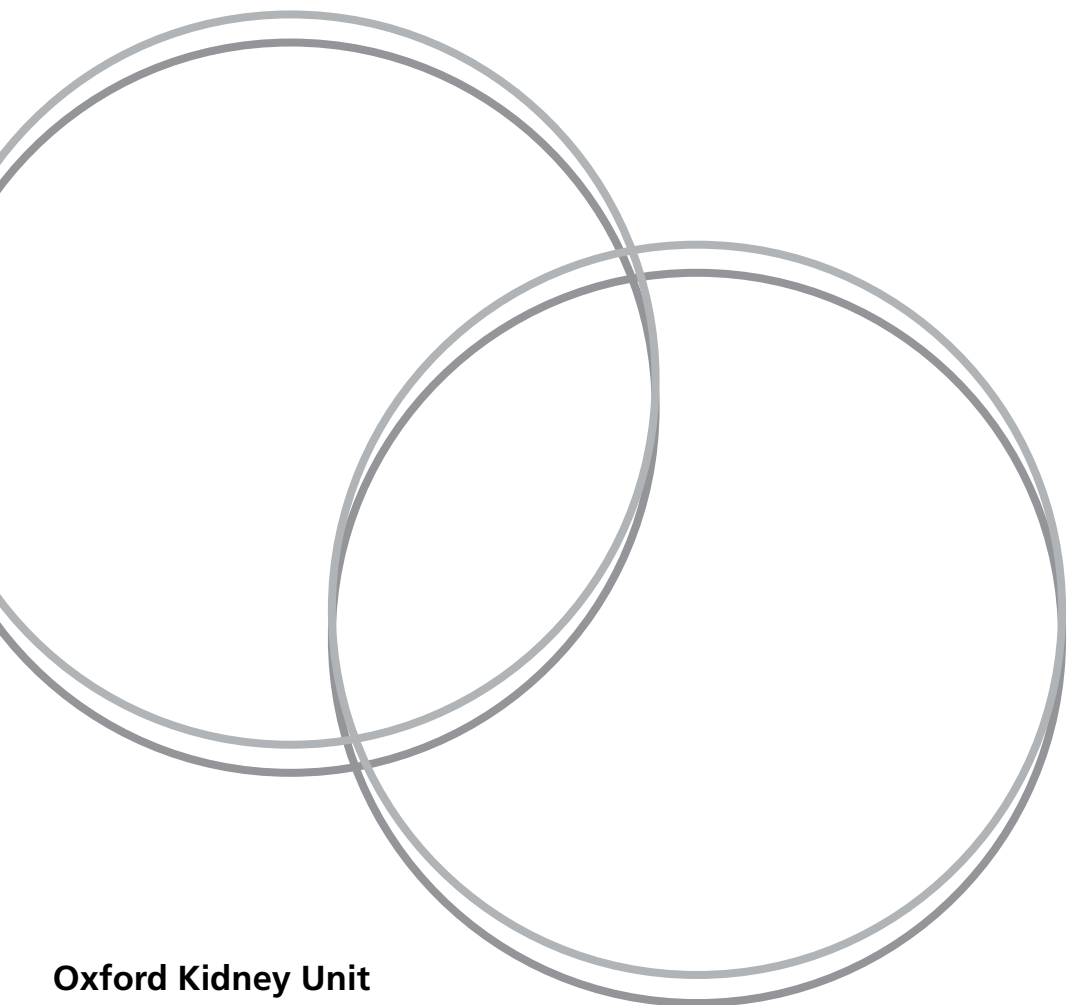




Oxford University Hospitals
NHS Foundation Trust

Kidney Biopsy

Information for patients



Oxford Kidney Unit

What is a kidney biopsy?

A kidney biopsy (also known as renal biopsy) is an important procedure to take samples of kidney tissue. These are each about the size of half a matchstick. The biopsies are then examined under a microscope by a specialist pathologist.

Biopsies can be taken from your own kidney or from your transplanted kidney, if you have had a kidney transplant. Kidney diseases usually affect both kidneys so you will only need a biopsy from one.

Why do I need a kidney biopsy?

Many kidney problems can be diagnosed from your symptoms, by examining you, by testing your blood and urine and by X-rays and scans. However, sometimes a kidney biopsy is needed to find out why your kidneys are not functioning as they should.

Your kidney doctor (nephrologist) or transplant surgeon will only recommend a kidney biopsy if it is necessary to help make the correct diagnosis and plan treatment. They will tell you what is being looked for and answer any questions about the procedure. Please don't be afraid to ask any questions you may have.

Where are the kidneys?

Your own kidneys are at the back of your abdomen (tummy) in front of the lowest two ribs. They are each about the size of a mango and are shaped like a broad bean. If you have a transplant kidney it will be at the front right or left side of your lower abdomen.

Is there any preparation needed before the biopsy?

If you take blood thinning medicines such as warfarin, aspirin or clopidogrel you should discuss this with your kidney doctor before the procedure. These medicines are usually stopped seven days before the procedure, to reduce the chance of bleeding during and after the biopsy.

Before the biopsy you will have had a scan of your kidneys, a blood test to check that your blood is clotting normally and a check of your blood pressure. These can be done two weeks before your biopsy.

You can eat as usual on the day before the biopsy. Have a small breakfast on the morning of the biopsy, as you will be lying on your front during the procedure. If you are having a biopsy of your transplanted kidney you will be lying on your back, so you can eat and drink normally.

We advise you to bring an overnight bag with your toiletries, dressing gown and nightwear, in case you need to stay in hospital overnight. However, you are likely to go home the same day.

You should not drive home or go home on public transport after the biopsy. You will need to be taken home by car. This will be more comfortable for you and also quicker for you to return to the hospital if there are any complications on the journey home. If you do not have anyone to take you home please phone the Renal Day Case Unit as soon as possible, so that transport can be arranged.

Tel: **01865 225 362**

What happens on the day of the biopsy?

If you are not already in hospital, you will be admitted to the Renal Day Case Unit at the Churchill Hospital at 8.30am. If you are already in hospital, we will come to see you on your ward.

Your blood pressure will be checked and blood and urine samples will be taken. If your blood pressure is too high, or you have signs of a urine infection, we will not be able to do the biopsy and will give you another date to come back to the Renal Day Case Unit.

You will then have a cannula (a small tube) inserted into a vein in your hand or arm. This will be used if you need an injection of a medication called desmopressin, to help prevent bleeding.

You will then be examined by a doctor to check whether the biopsy can go ahead. The doctor will explain the procedure to you and ask you to sign a consent form and change into a hospital gown.

The biopsy will be carried out in a bed on the ward, with screens or curtains for privacy. If you are having a biopsy of your own kidney you will be asked to lie on your front with some pillows under your tummy. The doctor then will use an ultrasound machine to check exactly where your kidneys are. The ultrasound creates images on a screen when it is rolled over a cool gel on your skin. The doctor will also use the ultrasound probe during the procedure to see exactly where the biopsy should be taken from.

For a transplant kidney biopsy you will be asked to lie on your back and the ultrasound will be used over your lower abdomen.

What happens during the biopsy?

The biopsy should not hurt, but may be slightly uncomfortable. Local anaesthetic will be injected into your skin to make it go numb and then more deeply, down to the edge of your kidney. This stings a little but will quickly make your skin and the deeper area go numb.

A special biopsy needle will then be inserted through your skin and into to your kidney. When the biopsy is taken you will be asked to hold your breath for a few seconds (for a transplant biopsy you will not need to hold your breath). The doctor will then remove the needle, which will contain a small kidney sample.

This is usually done twice, so two samples are taken from the same area. A plaster will then be put over the area where the needle went into your skin.

The biopsy procedure takes about 30 minutes.

What happens after the biopsy?

You will be asked to lie flat for two hours, as this reduces the risk of bleeding from the area of the biopsy or kidney. If you need to go to the toilet we will give you a commode or urine bottle. The nurse will examine your urine to check for blood and will monitor your blood pressure.

After two hours you can get up and walk around. All being well, you should then be able to go home.

What are the risks of the biopsy?

Although these do not happen often, complications can occur and it is important to be aware of them. Possible complications include:

- **Pain:** You will be given paracetamol after the kidney biopsy, if needed.
- **Minor bleeding:** This can be either into your urine (in around 1 in every 30 biopsies) or around your kidney. Most bleeding settles on its own.
- **Severe bleeding:** Occasionally (in less than 1 in every 100 biopsies) bleeding is more severe and you may need a blood transfusion.
Rarely, (in less than 1 in 200 biopsies) a further procedure is needed to stop the bleeding (called 'embolisation'). Life threatening bleeding requiring urgent surgery including removal of the kidney is extremely rare.
- **Failure to obtain an adequate sample:** Occasionally, (in less than 1 in 100 biopsies) the sample of kidney tissue is too small to provide reliable results. If this happens, we will need to repeat the biopsy at a later date.
- **Damage to the bowel:** This is very rare.
- **Risk of death:** This is very rare, less than 1 in 3,000 biopsies.

Is there anything I need to know when I go home?

If you get any discomfort from the biopsy site, you should take a mild painkiller, such as paracetamol. You may need to take these for up to 5 days.

You should always avoid taking anti-inflammatory painkillers, such as ibuprofen (Nurofen or Brufen), because they may cause further damage to your kidneys.

Do not take aspirin as a painkiller for a week after the biopsy, as this can increase the risk of bleeding. If you take other blood thinning medications regularly, your kidney doctor will tell you before you leave the ward when you can restart these.

You can return to driving once you are pain-free. Avoid heavy lifting or strenuous exertion for one week, as this could cause bleeding.

You can shower and bathe as normal once you go home and can remove the plaster on your back (or abdomen) the next day.

You may need 2-5 days off work, depending on the type of work you do. Your kidney doctor will discuss this with you. Your kidney doctor will also write to your GP to tell them you have had a kidney biopsy. They will give you a copy of this letter before you leave the hospital.

Signs to look out for

If you notice any bright red (fresh) blood in your urine, feel any new discomfort at the biopsy site or to your kidney, or become faint after you have gone home, you should telephone the Hospital switchboard on **0300 304 7777** and ask for the **on-call renal registrar** – tell them that you have had a kidney biopsy.

If you have any questions after you have gone home, please call the Renal Day Case Unit or the Hospital switchboard and ask to speak to the on-call renal registrar. Contact numbers are at the end of this leaflet.

When will I get the results of the biopsy?

Before you leave the hospital you will be given an outpatient appointment to see your kidney doctor. Your doctor will discuss the results with you at this appointment, as well as any treatment that you may need.

Where can I find more information?

National Kidney Federation

A UK based charity, run by kidney patients for kidney patients.

Website: www.kidney.org.uk

Kidney Research UK

A charity, helping people with kidney disease.

Website: www.kidneyresearchuk.org

The Renal Association

A professional group for the UK renal community.

Website: www.renal.org/information-resources/patient-leaflets

Oxford Kidney Unit

This has useful information about the unit for patients and their families and information about caring for your kidneys.

Website: www.ouh.nhs.uk/oku

NHS Choices

NHS Choices has a wide range of information about health related illness.

Website: www.nhs.uk

PatientView

This shows your latest blood results, letters and medicines.

Website: www.patientview.org

Six Counties Kidney Patients Association (SCKPA)

If you would like advice and support from patients with kidney disease and their families, the Six Counties Kidney Patients Association (SCKPA) is a helpful group to make contact with.

Website: www.sixcountieskpa.org.uk

How to contact us

Renal Day Case Unit

Tel: **01865 226 106** or **01865 225 362**

Renal Ward

Tel: **01865 225 780** or **01865 225 790**

If you need an interpreter or would like this information leaflet in another format, such as Easy Read, large print, Braille, audio, electronically or another language, please speak to the department where you are being seen. You will find their contact details on your appointment letter.

Making a difference across our hospitals

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OXFORD HOSPITALS CHARITY (REGISTERED CHARITY NUMBER 1175809)

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