



Having a kidney biopsy after your kidney transplant

This information sheet explains about having a kidney transplant biopsy at Great Ormond Street Hospital (GOSH) and what you can expect to happen. If you have any questions, please call the team on 020 7813 8172. During evenings and weekends, call Victoria Ward on 020 7829 8815.

What is a kidney biopsy and why do I need one?

A kidney biopsy is a test to take a tiny sample of your kidney, which will then be examined under a microscope. Doctors use kidney biopsies to work out why your kidney is not working as normal and what treatment is needed to improve it.

Doctors can tell a lot about how your kidney is working using other tests, such as blood and urine tests or ultrasound scans, but sometimes detailed information is needed and a kidney biopsy is the best way of finding this out.

What happens?

Before you have the kidney biopsy, the doctors need to check that your blood is clotting properly. This involves taking a small blood sample which is tested in our laboratories. Your blood type will also be checked in case you need a blood transfusion but this does not happen very often. We will also talk to you about whether to have the biopsy under general anaesthetic or using Entonox® (gas and air) with local anaesthetic.

On the day of the biopsy, we will take you to the Radiology department or theatre where the biopsy will take place. You will need to lie on your back on the bed – this is the best position to reach your new kidney. We will also use an ultrasound scan to check the best part of the kidney to biopsy – usually at the lower outer part. If you are having a general anaesthetic, you will be given an injection or some gas to breathe. If you are having Entonox®, we will give you a mouthpiece to breathe through during the test.

The doctor will inject some local anaesthetic into the area so it is numb and you won't feel any pain. A tiny cut about 2mm to 3mm long is made in the skin over your kidney so that

the biopsy needle can be inserted easily. The doctor will insert the biopsy needle and remove it again, bringing with it a tiny core of kidney tissue smaller than a grain of rice. This will be repeated to make sure that the sample is big enough. A member of the team will check that there is enough sample to analyse in the laboratory. Once enough tissue has been collected, this is sent to our laboratories to be examined under a microscope.

The tiny cut in your skin will be covered with a dressing. The area usually bleeds a little afterwards but this stops when pressure is applied to the site. You will come back to the ward to recover and we will monitor you closely for the first few hours. We will need you to stay in bed while we are monitoring you, but once we are sure that you will not bleed, you will be able to get up and about. Once we are happy that you are recovering well and you have passed a good amount of urine with no problems you will be able to go home.

What can go wrong?

- The place where the sample was taken from might be a little sore but usually taking some paracetamol will help. Remember, people with kidney problems (even after transplant) should not take non-steroidal anti-inflammatory medicines such as ibuprofen.
- Your urine might look a bit pink for a while after the biopsy. This happens because the kidney has lots of blood flowing through it and some escapes into your urine. Serious bleeding can happen, but only rarely, which is why we will monitor you closely for a few hours after the test. You could need a blood transfusion but this is very rare.

Even more rarely, kidneys have been lost because of serious bleeding.

- Rarely, blood clots form in your kidney and stop you passing urine, but this can be dealt with using a bladder catheter (thin plastic tube) for a while afterwards. Another rare complication is that the kidney might create a join (fistula) between a small artery and a small vein, which could cause bleeding and blood pressure problems.

When you go home

- Keep the dressing dry and over the biopsy site for a day or two after the test. This helps the area to heal and reduces scarring. After two days, you can remove the dressing.
- If you feel uncomfortable or have a dull ache over the area, you can take paracetamol according to the instructions on the bottle or packet, unless the doctors have told you otherwise.
- Your urine may look a bit pink for a few days after the test but this will improve.
- Take it easy for a few days when you get home. Avoid running about or riding a bicycle for two weeks and sports for four weeks after the test. You can go back to school or college two days after you come home.

Call us if:

- You have very blood stained urine – making it look pink or red
- The biopsy site is still painful three days or more after the test
- Paracetamol is not helping with any pain or achiness
- The biopsy site is oozing or bleeding
- You get a high temperature





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What happens next?

The tiny core of kidney tissue is processed in three ways to give the doctors all the information they need. First it is examined under a microscope, then the sample is stained and finally it is looked at using an electron microscope. Although some results may come back within a few days, it usually takes a few weeks to get all

the information needed. Most of the results should be ready by your next outpatient appointment, so please check that you have a consultant clinic appointment booked before you leave the ward.

Notes

Compiled by the Nephrology department in collaboration with the Child and Family Information Group

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