

Kidney biopsy

Pre-procedural information

You have been told that you need a kidney biopsy. This is a simple procedure performed under local anaesthetic by one of the kidney doctors. It will give us more information about your kidney condition.

What is a kidney biopsy?

It is a minor, but very important procedure to take a small sample of kidney tissue, about the size of half a matchstick, which can be examined under a microscope by a specialist pathologist (doctor specialising in medical diagnosis).

Why do I need a kidney biopsy?

There may be blood or protein in your urine or your tests may have shown some loss of kidney function. Although many kidney problems can be diagnosed from your symptoms, physical examination, blood tests and scans, there are others for which direct examination of a piece of kidney tissue is essential for diagnosis and treatment.

Where do I have the biopsy?

The kidney biopsy will be done on the CAPD Unit, Albert Ward in North Block. This may be as a day case. An overnight stay is required if you are going to be at home alone the night of the procedure, live more than an hour away from the hospital by car or require admission for adjustment of your tablets.

What do I have to do?

You will be sent an appointment for the biopsy and asked to have a blood test done 1-5 days before the biopsy, to check your kidney function and blood clotting. These essential blood tests are necessary to ensure your safety prior to commencing the procedure.

Without these results the biopsy will not go ahead.

If you are known to have high blood pressure it is essential that it is checked and within acceptable limits before the biopsy. When confirming your intention to attend we will require a recent blood pressure reading. We may need to alter your medication if it is too high.

If the procedure is to be performed as a day case, then you will be admitted to the CAPD Unit, Albert Ward at 8.30am on the day of the procedure. If you are to have an overnight

stay, you will be transferred to a ward, approximately 4 hours after the procedure.

Patients taking blood thinning agents must discuss with renal specialist if it is safe to stop prior to procedure.

- Clopidogrel stops for 2 weeks prior to procedure
- Warfarin stops for 5 days prior to procedure
- Aspirin stops for 7 days prior to procedure

Please inform us of any mobility issues before admission so we can make the appropriate arrangements for you.

Useful items to bring with you

- A packed lunch - drinks will be provided.
- An overnight bag with nightclothes and toiletries. These are suggested as a precaution, in case the consultant wishes you stay for overnight monitoring.
- Dressing gown.
- Medications in their original packaging.
- Reading matter.
- Pyjamas bottom, tracksuit trousers or leggings may be more comfortable to relax in post procedure.

Eating and drinking before your procedure

Please do not have anything to eat after midnight. You may drink only water until 2 hours prior to the procedure.

Please ensure you take your regular medications as usual (except *Aspirin* and *Warfarin*) with a small amount of clear water. Once you have had the biopsy, you may eat and drink.

Diabetic patients

If you are diabetic you may need to alter your insulin dosage and miss the morning insulin until after the procedure. Please discuss this with the nurse or doctor.

If you suffer from recurrent urinary infections

If you suffer from recurrent urinary infections and are exhibiting symptoms prior to the biopsy please inform us. It is not appropriate to biopsy during this time and the procedure will need to be rescheduled.

What will happen when I am admitted?

You will be welcomed to the ward. You will be shown to a bed and asked to change into a hospital gown. You will be seen by a doctor, who will ask you some questions about your general health and examine you. The doctor will ask you to consent to the procedure,

ensuring you understand the reason for the biopsy, how it will be performed and any risks involved.

The nurse will take some baseline measurements of your blood pressure, pulse, temperature, blood sugar levels (if you're diabetic), and will ensure you have a good understanding of what's going to happen. They will also test your urine prior to the biopsy.

What happens next?

The biopsy will be performed by one of the renal team doctors. You will be asked to lie on your front. The doctor will do an ultrasound scan, using a portable machine to check the exact location of your kidney. The skin over the area of the kidney will be cleaned with a sterile solution then covered with a sterile sheet. You will then be given an injection of local anaesthetic into the skin over the kidney. Once the skin is numb, a biopsy needle will be inserted into the skin and then into the kidney. As the doctor removes the needle a small core of kidney sample comes with it. Following the procedure the site will be covered with a dressing that will need to remain in place for approximately 24 hours.

Will it be painful?

You may have some discomfort after the biopsy. We do not routinely prescribe painkillers to take home and we recommend that you have a supply of *Paracetamol*, which can be taken as directed on the packet.

Do not take any aspirin, medications containing aspirin or anti-inflammatory drugs for one week after the biopsy – unless you have been given other instructions. We generally recommend that any renal patient avoid anti-inflammatory drugs (e.g. *Ibuprofen*, *Brufen*, and *Nurofen*) as this group of drugs can be damaging to remaining kidney function.

What will I be able to do afterwards?

You will be required to lie flat for one hour, and then remain on bed rest for a further 3 hours. If there are no problems, you will then be asked to gently mobilise for approximately 2 hours. If there are no problems you will then be discharged home.

You will be able to eat and encouraged to drink plenty of fluid as soon as the biopsy is done.

- Please let us know before attending for the biopsy if you are unable to arrange a lift home or cannot arrange for a responsible adult to remain with you for 24 hours after the biopsy.
- It is essential that we are aware of your home circumstances and your plans following discharge so we can make arrangements for you to stay in hospital if necessary.
- It is not safe to drive yourself home or to use public transport after the biopsy. However, you may travel home in a taxi accompanied by a responsible adult
- We also recommend as an additional precaution that if you live more than one hour away, by car, from the hospital that you remain in the hospital for your own safety.

Are there any problems that may occur after the biopsy?

You can expect a small amount of blood in the urine and you will be asked to drink plenty of fluid to flush the kidneys through. Complications of renal biopsy are rare. Bleeding either into the urine or making a bruise around the kidney can occur but you are monitored after the biopsy to detect this. The majority of bleeding is minor and needs no specific treatment. If there is an unexpected amount of bleeding you may need a blood transfusion. This occurs in less than 1 in 100 cases. In rare cases, a further special X-ray called an angiogram is done to find the bleeding point and to stop it. Very rarely, an operation is required. This happens in less than 1 in 1000 cases.

When will I get the results of the biopsy?

Before you are discharged you will be given an appointment for the renal clinic, if you do not already have one within the next 2-4 weeks. The consultants will then be able to discuss the results of the biopsy with you and any treatment that you may need.

Is there anything I need to know before going home?

- You must have passed urine and any signs of bleeding should be settling before you will be allowed home.
- You may return to work and other activities a couple of days after the biopsy. We recommend that you do not drive for 3 days.
- Avoid strenuous lifting or exertion for one week.
- You may bath and shower as normal the following day, but please ensure the dressing is removed from the biopsy site before you do so.
- If you need a certificate for your work, you should see your own GP.
- If you notice any bright red (fresh) blood in your urine, feel any discomfort or become faint after you have got home, you should contact your GP urgently and tell him or her that you have had a kidney biopsy.

If you have further questions following this information handout, please do not hesitate to ask the CAPD staff.

Department of Renal Medicine (Albert Ward)

Telephone: 0118 322 8555 Fax: 0118 322 8771

Out of Hours/ Bank Holidays – Victoria Renal Ward 0118 322 7462/8882

This document can be made available in other languages and formats upon request.

Written by Renal Unit, February 2019

Review due: February 2021