

Radiology department

Ultrasound guided biopsy of the kidney

Introduction

This leaflet tells you about the procedure known as an ultrasound guided biopsy of the kidney. It explains what is involved and what the benefits and risks are. It may make you think of things you would like to discuss further with your doctor.

What is an ultrasound guided biopsy of the kidney?

The radiologist will use the ultrasound scanner to guide a needle through the skin and into the kidney, and a small sample of tissue is removed. The sample can then be analysed under the microscope to give your doctor more information and help them decide on the diagnosis and the best treatment for you.

Is there any preparation for my biopsy of the kidney?

Most patients are able to be admitted as a day case procedure to The Christie. We will send you a letter giving you the details of your appointment.

What to tell the doctor

- If you have any allergies.
- If you have had a previous reaction to intravenous contrast medium (the dye used for some X-rays and CT scanning).
- If you are taking medication to prevent blood clots. Below is a list of some of the medications which are used to thin the blood and help to prevent blood clots.

If you are currently taking any of these medications, please contact your referring doctor or the radiology department on 0161 446 3325 as soon as possible, as these may need to be stopped prior to your procedure. Failure to do so may result in your procedure being postponed.

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|---------------|---------------|
| - Aspirin | - Enoxaparin |
| - Apixaban | - Fragmin |
| - Clopidogrel | - Heparin |
| - Clexane | - Rivaroxaban |
| - Dabigatran | - Warfarin |
| - Dalteparin | |



Are there any risks or complications?

Complications are uncommon, but with any medical procedure there are some risks involved. The most common complication of biopsy of the kidney is blood in the urine. This will normally settle down within a few days. Very occasionally, the bleeding can be more severe and you may need a blood transfusion and/or further intervention. This is very rare.

There is a small risk that the small wound may become infected.

The use of ultrasound guidance during this procedure helps to minimise the risk of complications. The radiologist performing the procedure will discuss the risk factors relevant to your condition with you before starting the procedure and will answer any questions that you have.

Agreeing to treatment

The radiologist will explain the procedure and discuss any possible risks with you. You will be asked to sign a consent form agreeing to accept the treatment that you are being offered. The basis of the agreement is that you have had The Christie's written description of the proposed treatment and that you have been given an opportunity to discuss any concerns.

You are entitled to request a second opinion from another specialist doctor. You can ask your own consultant or your GP to refer you. Your consent may be withdrawn at any time before or during this treatment. Should you decide to withdraw your consent then a member of your treating team will discuss the possible consequences with you.

What happens on the day of your procedure?

- You should be admitted on the morning of the procedure.
- You will have blood taken to check that it clots properly.
- A nurse will check your details and admit you as a day case.
- You will have a cannula (small plastic tube) inserted into a vein in your arm.

What actually happens during the procedure?

A member of the ultrasound staff will escort you into the scanning room and introduce you to the radiologist. They will explain the procedure to you and answer your questions. We will then ask you to sign a consent form.

Next, we will ask you to lie on the scanning couch and the radiologist will put some cold jelly on your skin. The radiologist will do an initial scan and will run the ultrasound probe over your skin. This will not hurt. The images of your body are displayed as a picture on the monitor. The radiologist will be looking at the ultrasound machine while carrying out the scan.

When the radiologist has identified the best area to take a small sample they will take a biopsy:

- An injection of local anaesthetic will numb the area.
- The radiologist will place the biopsy needle into the skin and gently guide it into the area to be sampled.
- There is sometimes a noticeable click and you may feel a small jolt as the radiologist takes the biopsy - this is quite normal.
- The needle is then removed and the sample is then placed on to a slide or into a special sterile bottle for analysis.
- There may be a cytologist, a person who examines cells, also present in the room.
- It may be necessary to repeat the procedure a few times to ensure that there is adequate tissue to analyse.
- During the biopsy you might feel some stinging or a stabbing pain, but this should not last.
- There may be some bruising following the procedure and this may be uncomfortable for a day or two.

What happens after my ultrasound scan and biopsy?

We will take you back to the recovery area/ward on a trolley where you will need to rest in bed for a few hours after the procedure. A nurse will carry out routine observations such as checking your pulse and blood pressure. If there are no complications, you should be able to go home approximately 4 hours following the procedure. The radiologist's report will be sent to your Christie doctor usually within a week.

What is the benefit of an ultrasound biopsy?

This allows a sample to be taken for analysis under the microscope. This is very important as it can confirm the nature of a suspicious area. This can then provide your doctors with valuable information to help plan the most appropriate treatment for you.

Are there any alternatives to an ultrasound biopsy?

There may be other tests which can be done instead of an ultrasound biopsy. However, they may not be able to provide the specialist information that your doctors need to make a definite diagnosis of your condition, or the tests may be more invasive. You should discuss this with the doctors who are looking after you.

What happens if I decide not to have an ultrasound biopsy?

There may be some uncertainty about the nature of the area needing investigation. Scans and blood tests may not give a clear answer. If you decide to do nothing this may mean that you miss out on important treatment.

What happens if I can't keep my ultrasound appointment?

If you cannot keep your appointment, please contact the ultrasound department straight away.

If you are admitted to hospital before your appointment, please tell the ward staff that you have an ultrasound appointment booked.

Important information:

A responsible adult must accompany you home and stay with you for at least 24 hours following the procedure.

You must not drive or operate machinery for the rest of the day.

Further information

This is available from the radiology department on the phone numbers below or from the following websites:

Macmillan Cancer Support: www.macmillan.org.uk

British Society of Interventional Radiology: www.bsir.org/patients

If you have any problems or worries, please contact:

From 9am to 5pm:

Radiology nurse, on **0161 918 2346** or

Radiology department on **0161 446 3322**

Out of hours and weekends (for emergencies):

Ring The Christie on **0161 446 3000** and ask for the on-call radiologist.

The Christie Hotline: **0161 446 3658** (24 hours)

If you need information in a different format, such as easy read, large print, BSL, braille, email, SMS text or other communication support, please tell your ward or clinic nurse.

The Christie is committed to producing high quality, evidence based information for patients. Our patient information adheres to the principles and quality statements of the Information Standard. If you would like to have details about the sources used please contact **the-christie.patient.information@nhs.net**

For information and advice visit the cancer information centres at Withington, Oldham or Salford. Opening times can vary, please check before making a special journey.



Contact The Christie Hotline for
urgent support and specialist advice
The Christie Hotline: 0161 446 3658
Open 24 hours a day, 7 days a week