



## My child needs a Kidney Biopsy - Information for Parents or Carers

This leaflet aims to answer some of the questions you may have about your child undergoing a kidney biopsy procedure. It explains the risks and the benefits of the procedure and what you can expect when your child comes to hospital.

If you have any questions or concerns, please do not hesitate to speak to the staff caring for your child.

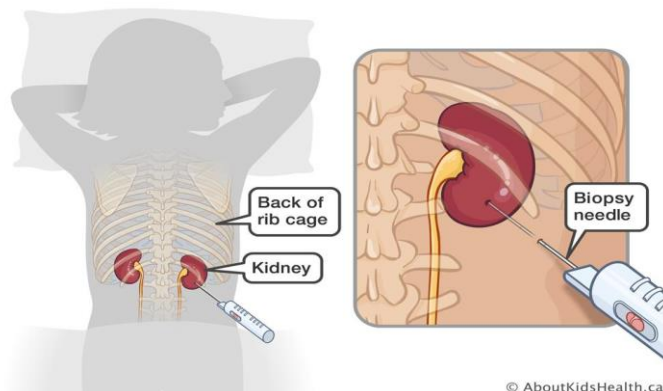
### What is a kidney biopsy?

A kidney biopsy (sometimes called a renal biopsy) is carried out using ultrasound guidance and involves the use of a long, thin, hollow needle to take two or three tiny pieces of tissue from the kidney through a very small cut in the skin. These samples of tissue taken from the kidney will then be sent for examination under a microscope.

A kidney biopsy is usually carried out to make a diagnosis or assess how the kidneys are responding to treatment. It may become necessary when blood and urine tests, ultrasound scans and other radiology imaging have not been able to give enough information about your child's kidney problem.

In children with a kidney transplant, a biopsy can identify why the kidney is not working well and what treatment is needed.

### Kidney biopsy



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## Who carries out the procedure?

An interventional radiologist, who will be supported by a radiographer and nursing team, carries out the kidney biopsy procedure. All are trained professionals in this type of procedure.

## Possible risks of having a kidney biopsy.

Your child’s anaesthetist and radiologist will discuss any side effects or complications with you, but possible complications include:

- **Localised pain.** Some children may get a little bit of pain (like a bruise pain) over the biopsy site, but this is not usually serious. Paracetamol is usually enough to help this. It is common to get a little bruising around the kidney which settles quickly.
- **Blood in urine.** Children may see that their urine (wee) is slightly pink as commonly a small amount of blood leaks into the urine afterwards. This usually settles within the first 24 hours and is normal. Occasionally, heavier bleeding can cause blood clots to form in the urine.
- **Infection.** Infection around the biopsy site, or rarely, in the kidney – you can help reduce this risk by keeping the biopsy site clean and dry. An infection needs to be treated with antibiotics, medicines to kill the germs. Very occasionally a minor operation to drain the infected blood is needed.
- **Joining of two types of blood vessels in the kidney (fistula).** Another very rare complication is the creation of a join between a small artery and a small vein, called a fistula, which can very occasionally cause bleeding and blood pressure problems.

This can be diagnosed with an ultrasound and will usually need a ‘keyhole’ procedure to treat it.

## Consent

We want you to be involved in all the decisions about your child’s care and treatment. Your child’s radiologist will discuss any risks to your child with you and they will answer any questions you have before the procedure. If you choose to go ahead, you will be asked to sign a consent form. This confirms that you agree for your child to have the procedure and understand everything involved.

## Fasting

Your child will be asked not to eat or drink anything for 6 hours before the procedure.

## What happens before the procedure?

Please attend the appropriate department as stated on your appointment letter with your child. The ward staff will help to prepare your child for their procedure; this will include completing a theatre checklist and taking a blood sample. There is play specialists there to help your child understand what is going to happen. We will discuss with you whether your child needs to come in the night before or on the day of the biopsy. Some older children have kidney biopsies with a local anesthetic, whereas other younger children may have a full general anesthetic. We will discuss with you the best approach for your

child. The Royal Victoria Hospital and Royal Belfast Hospital for Sick Children are teaching hospitals and as such, university students may attend, with your permission.

### What happens during the procedure?

Your child will be transferred onto the X-ray table. Monitors will be attached to record heart rate and blood pressure. Once your child is under general anesthetic or has local, they will lay on their left side if their own kidney (native kidney) is being biopsied. When a child has two kidneys, we usually take a biopsy from the one on the right hand side. If the biopsy is on a transplanted kidney, your child will lie on their back, as this makes it easier to reach the transplanted kidney.

The exact position of the kidney is confirmed using an ultrasound scan, which also identifies the best place to take the biopsy. This is usually at the lower and outer part of the kidney.

Local anesthetic is injected under the skin at the biopsy site and along the path between the skin and the kidney. The only cut that is made is a tiny nick in the skin to allow the biopsy needle to enter more easily. This nick is 2mm to 3mm long and is so small that it does not need a stitch afterwards.

The biopsy needle has a hollow center, and when it is removed, it brings a very fine core of kidney with it. This is about the size of a grain of rice and is approximately 1cm to 2cm long. This will not affect kidney function. Usually two or three samples are taken so that enough tissue is available for testing in our laboratories.

The samples of kidney tissue are given to a technician who looks at it under the microscope to make sure the sample is adequate.

The biopsy site will be covered with a dressing. The area usually oozes slightly straight after the procedure, but this will stop when pressure is applied to the site.

### Duration

The procedure is performed in the Children’s x-ray department and should take approximately 1 hour.

Whilst we try to accommodate all patients at their appointed time, occasionally emergencies arise which may delay your child’s procedure or result in an extend length of time in the ward prior to the procedure. If your child’s procedure is cancelled due to an emergency, it will be reappointed for the next available slot.

### What happens after the procedure?

Your child will then return to the ward where they need frequent observations of their heart rate, breathing and blood pressure to make sure their body has not been upset by the biopsy – very rarely a child can bleed after a kidney biopsy. For this reason, we need your child to lie as still as they can for four hours or more.

## Aftercare following discharge

You will be given information on caring for your child at home after their biopsy procedure. It is important to keep the dressing dry and in place for two to three days after the procedure. This helps the biopsy site to heal and reduces the risk of scarring. The dressing can then be removed.

Your child may feel uncomfortable for a couple of days afterwards and may experience a dull ache in the area where the biopsy was taken. It is fine to give your child paracetamol (given according to the instructions on the bottle) unless you have been advised otherwise.

Your child’s urine may look slightly pink afterwards due to a small amount of bleeding. This will usually settle down within 24 hours.

When you get home your child should take it easy and not run around or ride a bike for two weeks. We advise that they stay off school for two days after the biopsy. Your child should avoid contact or impact sports such as rugby, football, trampolining or horse riding for the next four weeks to allow the kidney to heal properly.

You should call the ward if:

- Your child has obvious blood or clots in their urine (wee).
- The biopsy site is very painful – for example, normal pain relief is not helping and your child is unable to play, get up or walk in the days after discharge.
- There is any oozing or bleeding from the biopsy site
- Your child develops a fever

## Results and follow-up

You may be able to discuss your child’s procedure with the performing interventional radiologist once it is complete. The performing interventional radiologist will dictate a formal report on the procedure, and it will be attached to your child’s images on our Radiology Information System (RIS). A copy of the report will be sent by Radiology to the referring clinician. The referring clinician will arrange any follow up.

## Image sharing

Your images will be electronically stored on the hospital picture archiving system. This data can be accessed throughout the Belfast Health and Social Care Trust and other doctors and health care professionals who are directly involved in your care. The ability to share images and radiological reports will improve the safety and quality of your care by ensuring that the right information is available in the right place at the right time.

In order to improve the medical services we provide we may also use your data as anonymously as possible for internal audit and medical education. If you would prefer that your data is not used for these purposes, please inform a member of staff when you attend for your examination.

If your data is to be used for research, then a separate consent process will be used. You will be asked for your consent, should this be the case.

## Contact us

If you have any queries, we will be happy to answer any questions before or after your child's procedure and you can contact us on the number given on your appointment letter.

**Radiology Department, Royal Belfast Hospital for Sick Children Tel: 028 96150289**

Further information can be accessed on the British Society of Interventional Radiology patient portal: [https://www.bsir.org/patients/what-is-interventional-radiology/#col\\_right](https://www.bsir.org/patients/what-is-interventional-radiology/#col_right).

## Feedback

We hope you found the information in this leaflet helpful. If it did not tell you what you needed to know or you would like to provide any feedback on your experience please let us know so that we can make any necessary improvements.

### **You can provide feedback on your experience:**

Telephone: (028) 9504 8000 (Monday-Friday: 9am-4pm)

Textphone: 18001 028 950 48000

By email: [compliments@belfasttrust.hscni.net](mailto:compliments@belfasttrust.hscni.net)

By email: [complaints@belfasttrust.hscni.net](mailto:complaints@belfasttrust.hscni.net)

By completing an online form: <http://www.belfasttrust.hscni.net/contact/FeedbackForm.htm>

## Care Opinion



We invite you to share your experience by clicking the following link:  
<https://www.careopinion.org.uk/>

or by scanning the following QR code on your smartphone or tablet:



## Language and accessible support services

### Deaf/Hard of Hearing

If a Sign Language interpreter is required, please either telephone **028 9615 8900** via the Sign Video remote interpreting service (<https://signvideo.co.uk/deaf-community/>) or email us at [MPHAdminFOH@belfasttrust.hscni.net](mailto:MPHAdminFOH@belfasttrust.hscni.net) and we will arrange one for your appointment. Please have your H&C number ready when calling or include it in your email. This can be found at the top right corner of any Health and Social Care letters you may have received.

If you are unable to hear on the phone and need to contact us with regards to your appointment you can email us at [MPHAdminFOH@belfasttrust.hscni.net](mailto:MPHAdminFOH@belfasttrust.hscni.net).

### Do you need this information in another format or language?

The Trust has access to interpreting and translation services. If you need this information in another language or format, including Braille, large print, CD, audio tape please contact the telephone number **028 9615 8900** or e-mail address [MPHAdminFOH@belfasttrust.hscni.net](mailto:MPHAdminFOH@belfasttrust.hscni.net), and we will do our best to meet your needs.

### Polish - Czy potrzebujesz tych informacji w innym formacie lub języku?

Fundusz ma dostęp do usług w zakresie tłumaczeń ustnych i pisemnych. Jeśli potrzebujesz tych informacji w innym języku lub formacie, w tym w piśmie Braille'a, dużym druku, na płycie CD, kasecie magnetofonowej, skontaktuj się z nami pod numerem telefonu lub adresem e-mail **028 9615 8900 / MPHAdminFOH@belfasttrust.hscni.net**, a my dołożymy wszelkich starań, aby spełnić Twoje potrzeby.

### Arabic - هل تحتاج هذه المعلومات بصيغة أو بلغة أخرى؟

تستطيع الجمعية توفير خدمات الترجمة الفورية والتحريرية. إذا احتجت هذه المعلومات بلغة أو بصيغة أخرى، بما فيها صيغة برايل Braille أو صيغة بالأحرف الكبيرة، أو في سي دي CD أو في شريط مسموع، يُرجى الاتصال برقم التليفون أو عبر البريد الإلكتروني **MPHAdminFOH@belfasttrust.hscni.net / 028 9615 8900**، وسوف نبذل قصارى جهدنا في تلبية احتياجاتك.

### Lithuanian - Ar jums reikia šios informacijos kitu formatu ar kalba?

Tarnyba gali suteikti vertimo žodžiui ir raštu paslaugas. Jei reikia šios informacijos kita kalba ar formatu, įskaitant Brailio raštą, didelį šriftą, kompaktinį diską, garso įrašą, skambinkite telefonu arba susisiekite el. paštu **MPHAdminFOH@belfasttrust.hscni.net / 028 9615 8900** ir mes padarysime viską, kad patenkintume jūsų poreikius.

### Romanian - Aveți nevoie de aceste informații într-un alt format sau altă limbă?

Trustul are acces la servicii de interpretariat și traducere. Dacă aveți nevoie de aceste informații într-o altă limbă sau într-un alt format, inclusiv Braille, tipărire cu caractere de mari dimensiuni, CD, înregistrare audio, atunci vă rugăm să ne contactați la numărul de telefon sau la adresa de e-mail **MPHAdminFOH@belfasttrust.hscni.net / 028 9615 8900**, iar noi vom face tot posibilul pentru satisfacerea necesităților dumneavoastră.

### Tetum - Ita presiza atu informasaun ida ne'e iha formatu ka lian seluk ka lae?

Fidusiáriu ida ne'e iha asesu ba servisu durubasa no tradusaun. Se Ita presiza informasaun ida ne'e iha lian ka formatu seluk, inklui letra Braille, letra boot, CD, kasete audio, entaun favór telefone númeru ka enderesu e-mail **MPHAdminFOH@belfasttrust.hscni.net / 028 9615 8900**, no ami sei halo esforsu tomak atu kumpre Ita-nia nesesidade sira.