

Kidney biopsy

Overview

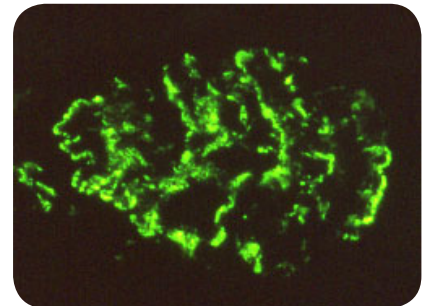
This leaflet has an overview of this topic.

Go to www.infoKID.org.uk to find out more about this topic,
or to find other topics for parents and carers about children's kidney conditions.

This topic gives you information about a kidney biopsy, including:

- what is a kidney biopsy, and why your child may need one
- risks, alternatives and consent
- what happens before the biopsy, including tests
- what happens during the biopsy
- what happens after the biopsy, and what to do when you get home.

It is common for children to be worried about a kidney biopsy. A team of healthcare professionals will help you and your child prepare for it, so you know what to expect.



About a kidney biopsy

A **kidney biopsy** is a procedure in which a tiny piece (sample) of a kidney is removed from the body. This sample is examined in a laboratory to find out more about the kidney's health.

Why does my child need a biopsy?

Your child's **paediatric nephrologist** (a doctor who treats children with kidney problems) may recommend a kidney biopsy to:

- diagnose a kidney condition, so the most appropriate treatment can be started
- find out how well a treatment for a kidney condition is working
- for children who have had a kidney transplant, check for any problems

Most of the time, a kidney biopsy is planned in advance. Occasionally, it needs to be done urgently while a child is in hospital.

Risks, complications and alternatives

Only a tiny sample of the kidney is taken, so the procedure does not affect how the kidneys work.

It is very rare for a kidney biopsy to have serious complications, or problems. Occasionally the doctor is not able to get a good enough sample in the first biopsy. This can happen in up to 5 of 100 biopsies. If this happens, your child may need to have another biopsy.

No surgical procedure is completely without risks, and it is important that you understand these. Your doctor will speak with you and your child about the possible problems with a kidney biopsy before you consent (agree) to the procedure.

Common complications

These complications happen in *more than* 1 in 100 biopsies.

- Pain and bruising at the **biopsy site** (where the

needle is inserted) – this normally goes away after a few days. You may give your child paracetamol to help with any pain – but do not give ibuprofen unless your doctor tells you otherwise.

- Visible blood in the urine (wee) – this can happen in up to 10 of 100 biopsies and normally stops within 24 hours.
- **Blood clots** (where the blood clumps together) in the urine – these only happen when there is visible blood in the urine. They usually resolve (get better) without treatment, but occasionally need to be “flushed out” with a catheter, a plastic tube that is passed through the urethra (the tube that your child wees out of) and into the bladder, so that the blood clots can be removed.

Rare complications

These complications happen in *fewer than* 1 in 100 biopsies.

- 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.
- Heavy bleeding in the urine – some children who get heavy bleeding need a **blood transfusion** to receive new blood from a donor. A small number need a minor operation to stop the bleeding.
- Joining of two types of blood vessels in the kidney (**fistula**) – this normally causes no problems and gets better on its own. Occasionally, a fistula leads to bleeding or problems with blood pressure and will need surgery to treat it.

Going back to hospital

Most of the time, these complications are found before a child leaves the hospital. Occasionally, children need to go back to hospital.

Alternatives

A kidney biopsy is usually done when other tests have not been able to identify the cause of a kidney problem.

The alternative is not to have the biopsy, but rather to use other tests to guide treatment. This may mean that your child may not get a specific treatment that might have been identified by the kidney biopsy results. You can discuss any alternatives with your doctor.

Before the biopsy

Your child will be admitted to the paediatric renal unit on the day or one day before the biopsy. The kidney biopsy will take place in an operating theatre, the radiology department or a treatment room on the ward.

On the day of the biopsy, or at an earlier visit, your child will need some tests. These include **blood tests**, **urine tests** and a **blood pressure measurement**.

During the biopsy

The team of healthcare professionals looking after your child will make sure he or she is as comfortable as possible. They will use **sedation** or **anaesthesia** – medicines so your child does not feel pain during the procedure. Most children are asleep for the procedure and so will not feel the biopsy.

The doctor uses an **ultrasound scanner** to help find the right part of the kidney. This shows pictures of the inside of the body. It is similar to the scan that many women have when they are pregnant. After your child has medicines to go to sleep or stop feeling pain, the doctor will make a small cut in the skin. He or she will insert a needle with a hollow centre through the cut and into the kidney and remove one or more small samples of the kidney.

Children who have a history of bleeding problems, such as a blood-clotting disorder, or who have only one kidney, may need to have a different type of biopsy. Your doctor will discuss this with you.

After the biopsy

After the biopsy, your child will return to the hospital ward where he or she will rest and be monitored. If there are no problems, your child may be able to go home after 6 hours, though sometimes an overnight stay is needed.

Some children will continue to have a little blood in their urine after they get home.

➔ **If your child continues to have visible blood in their urine after 24 hours, contact the hospital.**

Call the ward if:

- your child complains that the biopsy site is very painful – for example, if normal pain relief is not helping and your child is unable to play, get up or walk in the days after they go home
- you can see blood, or blood clots, in your child's urine more than 24 hours after the biopsy
- there is any oozing or bleeding from the biopsy site, or if it becomes red
- your child cannot wee
- your child gets a fever (temperature above 38°C)
- your child feels faint or dizzy.

School and daycare, and sport

Your hospital staff will give you more information about when your child can go back to school or daycare and start doing their usual activities.

Results

It can take several weeks to get the full results because of the different ways in which the kidney samples are examined. The amount of time depends on your hospital.

Your doctor will let organise a follow-up visit to talk about the biopsy results and what they mean.

» **More about kidney biopsy on www.infoKID.org.uk**

Your notes and contact information

www.infoKID.org.uk



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