
Renal Biopsy Information for Families

Why does your child need a renal biopsy?

Although we can get a lot of useful information from blood and urine tests, sometimes we need the extra information from a biopsy to help us find out exactly what is happening inside the kidney. A renal biopsy can give more information about what is happening with your child's kidneys and help to decide the best treatment for your child.

What is a renal biopsy?

A renal biopsy is a test that is done to look directly at the kidney. Doctors from the x-ray department use an ultrasound machine to guide a needle to remove a very small piece of kidney tissue. Each kidney contains hundreds of thousands of tiny blood vessel filters (glomeruli) and only about 20-30 filters are removed. This tiny piece of kidney is then examined under a microscope to give as much information as possible about what is happening in your child's kidney.

This procedure is usually carried out under a general anaesthetic, so your child will be asleep during the biopsy. There is no cut or stitching required.

What happens when your child has a renal biopsy at Starship?

Before having a biopsy, your child needs to have a scan to see if they have two kidneys in the normal place. They also need to have blood tests to make sure that their blood clots normally. These tests might be done at your own hospital or at Starship. You will receive a letter that will give you more information about travel and what you need to do.

If you live out of Auckland you will be asked to come up the day before the biopsy to make sure that all these things have been checked, and for one of the Starship doctors to see you and go through any questions you might have. We also prefer that you stay in Auckland the evening of the biopsy. Accommodation at Ronald McDonald House can be arranged if necessary, and your own hospital/district health board will help to arrange travel and accommodation.

As the biopsy is done under a general anaesthetic your child will be asked not to eat or drink from early in the morning on the day of the test. Your child will usually be admitted to the Day Stay Unit, and the biopsy is done in the operating theatre under a general anaesthetic, usually on a Wednesday morning. Sometimes we have to ask for more urgent biopsies to go on the "acute list." This list is for urgent surgery too and this means we cannot always give you the exact time of your child's biopsy. We will try to keep you fully informed with waiting times. The biopsy itself only takes 10-15 minutes. Someone from the kidney team will meet with you and you will have the chance to ask them any questions.

Consent forms

You will be asked to sign two forms. This is a good time to ask any questions you might have. The first is to give permission for the biopsy to be done. You will be given information about possible complications - these are very rare. They include the possibility of bleeding, pain and infection. You will also be asked to sign a form to give permission for your child to have an anaesthetic.

After the biopsy

After the biopsy your child will go to recovery to wake up and then go back to the Day Stay Unit or Ward. They will have a small plaster on their back and this can be removed after a couple of hours. To reduce the chance of bleeding or bruising inside the kidney we ask that your child lies on a bed and rests for 4-6 hours after the test. They can eat and drink normally afterwards. If they are sore they can have paracetamol or another painkiller. After the observation time, if everyone is happy then you can go home, or back to Ronald McDonald house for the night.

What happens with the results?

The piece of kidney has to have several different tests done. Some of the results come back within a week and some can take longer. If you are usually seen at a different hospital then one of the Starship kidney doctors will ring your Paediatrician too with the results as they come through. Your paediatrician will talk to you about what it shows and what treatments have been suggested. If your child is usually seen at Starship then you should have a clinic appointment arranged to talk about the results.

What happens when you go home?

Your child might feel sore for a couple of days afterwards and giving paracetamol regularly can help with this. They can go back to school after a couple of days. They should avoid playing sports or heavy lifting for at least week afterwards.

You should get in touch with a doctor if:

- Your child has pain that isn't going away and/or
- Your child's urine is getting red, or coke-coloured,

as they might need a scan to see if the bruise that forms after the biopsy has got bigger. This may mean your child needs to stay in bed for longer