Kidney biopsy test

A kidney biopsy (also known as renal biopsy) is a way to learn about your child’s kidney disease. This test is when a healthcare provider takes a small sample of tissue or cells from the kidney. The sample is then examined under a microscope and helps your child’s care team determine what is wrong with your child’s kidney. Your care team will then determine what’s the best treatment plan for your child.

• Do not give your child any aspirin or medicine with aspirin, ibuprofen, or naproxen for 7 days before the scheduled biopsy. These medicines increase the risk of bleeding during the biopsy. Ask your child’s healthcare provider if you have questions about other medicines.

• Do not give your child anything to eat or drink after midnight the day before the biopsy.

What happens at the hospital?
After you and your child have checked in, there will be some preliminary tests that need to be done before the kidney biopsy. The tests include:

• A urine sample
• A blood test to make sure your child’s blood clots correctly

After these tests, the healthcare provider will review what happens during the biopsy. Your child will have the biopsy test in the medical imaging department. You may go with your child to the ultrasound room, but you must wait in the waiting area during the test.

What happens during a kidney biopsy?

1 An IV (a small tube placed into a vein) will be put into your child’s hand or arm so they can receive fluids and medicines. Medicine will help your child relax. Your child can have more medicine through their IV if they need it during the biopsy.

2 Your child will lie on their stomach for the biopsy since the kidneys are in the lower back. A healthcare provider will put a blanket roll under your child’s stomach. This helps keep the kidneys still and push them up toward the back so their healthcare provider can see them better. (If your child has had a kidney transplant, they will lie on their back.)

How do I prepare my child for a kidney biopsy?

A kidney biopsy requires your child to stay in the hospital for at least 24 hours. You will get specific instructions from your healthcare provider prior to your child’s scheduled surgery. It is important to remember that your child should not have these things before coming to the hospital:
An ultrasound (a picture made by using sound waves) will be used to see your child’s kidneys. A healthcare provider will do this by first, putting gel on your child’s back and rolling a small wand with a camera over the gel. The wand sends a picture of the kidneys to a computer screen. The healthcare provider will mark the kidney’s location on your child’s back with a pen.

The skin will be cleaned with sterile soap. This may feel cold and wet to your child. They will then put sterile sheets over your child’s back.

The healthcare provider will numb the biopsy area from the skin down to the kidney. The medicine will be given by a small needle. Your child may feel a warm, stinging feeling for a short time. This feeling will go away within seconds as the area becomes numb.

The biopsy needle will be inserted by the healthcare provider. Your child may feel pressure as the needle is inserted. The needle makes a popping sound, which your child may hear 2–3 times.

The biopsy collected will be examined under a microscope. This sample is a small collection, 2–3 tiny pieces, (about the size of a pencil tip) which will help the healthcare provider determine what is wrong with your child’s kidney.

Once the biopsy is done, a healthcare provider will wash off the soap, put a bandage on the biopsy site, and remove the blanket roll. Your child can then lie on their back.

What happens after the renal biopsy?

After the biopsy, your child is moved to a hospital room. They may sleep for 4–6 hours after the test due to the biopsy medicine. Your child will continue to have IV fluids until they wake up and can drink fluids. They may eat and drink when they are ready.

Strict bed rest is required for the next 24 hours to keep your child safe. That means your child cannot get out of bed and must use a bedpan. Bed rest allows the kidney to heal and decreases the chance of bleeding.

Healthcare providers will check your child’s blood pressure often during the first 4–6 hours after the biopsy. They will also collect and check your child’s urine for blood.

What happens when my child goes home?

In most cases, your child can go home after 24 hours of bed rest. It takes the kidney about a week to fully heal. To protect your child’s kidney while it heals, your child should not do any strenuous activities or play contact sports for a week after the biopsy.

When should I call my child’s healthcare provider?

Call the healthcare provider if your child has:

- Blood in their urine (urine color will have a pink tint)
- Fever
- Bleeding at the biopsy site
- Red and inflamed area around the biopsy site
- Pain in their tummy or back that won’t go away