

Kidney Biopsy

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Test Overview

The two kidneys [{IMAGE LINK 1}](#) are found on either side of the spine, in the lower back. They help the body balance water, salts, and minerals in the blood. The kidneys also filter waste products from the blood and make urine.

A kidney biopsy may be done to check for kidney problems. It may also be done after other tests for kidney disease, such as blood and urine tests, ultrasound. If kidney cancer is suspected, a biopsy may not be done because of the chance of spreading the cancer.

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Why It Is Done

A kidney biopsy is done to:

- Find kidney disease when there is blood or protein in the urine or when the kidneys are not working well.
- Check kidney problems seen on an ultrasound or a CT scan.
- Watch kidney disease and see if treatment is working.
- See whether a transplanted kidney is working.

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How to Prepare

Tell your doctor if you:

- Are taking any medicines. If you are taking, nonsteroidal anti-inflammatory medications (NSAIDs), or blood thinners, your doctor may tell you to stop taking these medicines for several days before the biopsy.
- Are allergic to any medicines, such as those used to numb the skin (anesthetics).
- Are or might be pregnant.

Do not eat or drink for 8 hours before the biopsy. Your bladder needs to be empty for biopsy.

You will have blood tests done before the kidney biopsy to see whether you have any bleeding problems or blood clotting disorders. You may also have an ultrasound test or CT scan of the kidney to show the best place in your kidney to put the biopsy needle.

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How It Is Done

A kidney biopsy is done by a urologist, nephrologist, or a radiologist in a clinic or a hospital. A kidney biopsy is often done by a radiologist using ultrasound, fluoroscopy, a CT scan, or magnetic resonance imaging (MRI) to help guide the biopsy needle.[{IMAGE LINK2}](#)

Before the biopsy, you may be given a sedative through an intravenous (IV) line in a vein in your arm. The sedative will help you relax and lie still during the biopsy.

Your doctor will examine your back and may mark the biopsy site by making a slight dent in your skin with a pencil or tool. The biopsy may be done on either the right or the left kidney. The site will be cleaned with a special soap. Your doctor then gives you local anesthetic to numb the area where the biopsy needle will be inserted.

Your doctor puts the biopsy needle through the skin while looking at your kidney with ultrasound. You will be asked to hold your breath and stay very still while the needle is put into the kidney.

The needle is removed after the tissue sample is taken. Pressure is put on the biopsy site for several minutes to stop the bleeding. Then a bandage is put on the site. The biopsy takes 15 to 30 minutes.

After the biopsy, you will rest in bed for 6 to 24 hours. Your pulse, blood pressure, and temperature will be checked often after the biopsy.

You may eat your normal diet. Do not take anti-inflammatory medicines for a week after the biopsy. You may do your regular activities, but do not do strenuous activities, such as heavy lifting, hard running, motorcycle riding, contact sports, or other activities that might jar or jolt your kidney, for 2 weeks after the biopsy. Also, drink more fluids so you will not be dehydrated.

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Results

A kidney biopsy is done by inserting a long needle through the back (flank) to remove a sample of kidney tissue{[IMAGE LINK3](#) }. Samples of kidney tissue are sent to a pathology lab, where they will be looked at under a microscope for kidney diseases, such as kidney cancer.

Biopsy results are ready in **2 to 4** days. If tests are done to find infections, it may take several weeks for the results to be ready.

Kidney biopsy	
Normal:	The structure and cells of the kidney look normal. There are no signs of inflammation, scar tissue, infection, or cancer.
Abnormal:	The sample may show signs of scarring due to infection, poor blood flow, glomerulonephritis, a kidney infection (pyelonephritis), or signs of other diseases that affect the body, such as systemic lupus erythematosus.
	Kidney tissue may show tumors that were not expected, such as Wilms' tumor (which occurs in early childhood) and renal cell cancer (which is most common after age 40). For details please refer report.

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What Affects the Test?

Reasons you may not be able to have the test or why the results may not be helpful include:

- Having an untreated bleeding or blood clotting disorder.
- Having advanced kidney disease, uncontrolled high blood pressure, or only one kidney.

- Being obese.
- Having a severely deformed spine.
- Having a urinary tract infection.

IMAGE 1: SHOWING TWO KIDNEYS

Front View of Urinary Tract

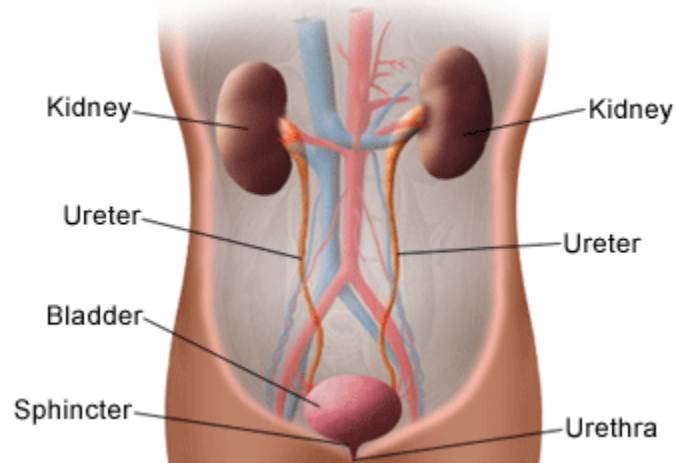


IMAGE 2: SHOWING KIDNEY AND BIOPSY NEEDLE

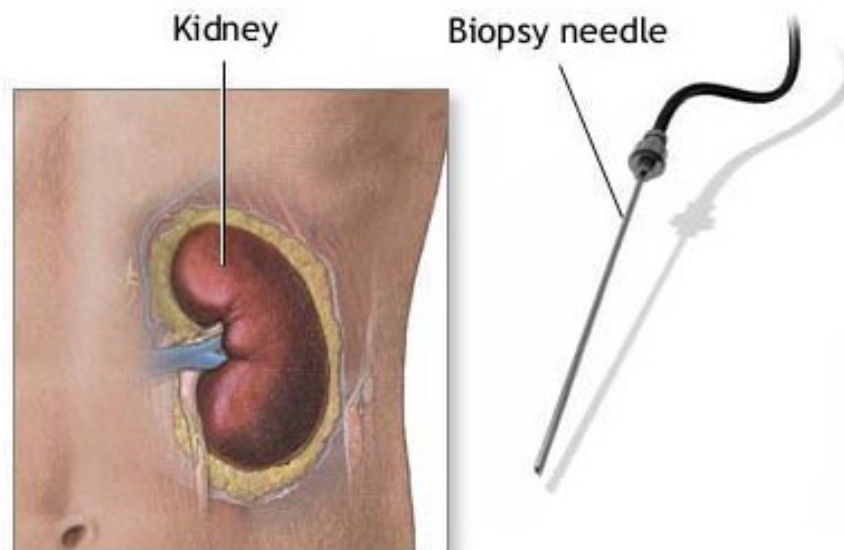


IMAGE 3: MRI IMAGE SHOWING INSERTED NEEDLE

