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KIDNEY DISEASE
ACUTE AND CHRONIC DIALYSIS
TRANSPLANT MEDICINE
HYPERTENSION

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Biopsy Information

My doctor told me I need a kidney biopsy. What does this mean? Your doctor wants to take a tiny piece of your kidney to use for special tests. The results will help your doctor decide what treatment you need to help your kidneys, and to anticipate your kidney function and progress in the future.

How is a kidney biopsy done? A thin needle is passed through the skin into the area of the kidney. Inside the needle is a sharp cutting edge that slices and removes small pieces of the kidney. This type of biopsy is called percutaneous (through the skin) biopsy. Often, the doctor uses X-rays or a form of sonar to make sure the needle is in the kidney. Another type of biopsy is called open kidney biopsy. This requires surgery rather than a needle.

Why are kidney biopsies done? Kidney biopsies are performed for several reasons:

- To identify a specific disease process and to determine whether it may respond to treatment.
- To evaluate how much damage has occurred in the kidney.
- To find out why a kidney transplant may not be doing well.

This information helps the doctor plan what treatment is needed.

What does a kidney biopsy involve? Is it painful? Is anesthetic used? How long does it take? The kidney biopsy can be done either with the patient fully awake under light sedation or with the patient under general anesthesia. A local painkiller is injected into the skin where the needle will enter to minimize pain. Generally, only mild discomfort is felt. The biopsy usually takes 30 to 60 minutes including locating the kidney, sterile cleaning of the entry site, injecting anesthetic and obtaining enough tissue.

For the biopsy, you will be lying down on your stomach with a pillow under your rib cage area to press against your kidneys. However, if the biopsy is being done on a kidney transplant, you will be lying on your back. The kidney is located using ultrasound and/or X-ray. Sometimes, intravenous dye is needed to help locate the kidney.

Once the site of entry to the kidney is marked, with a local painkiller, the biopsy needle is then inserted. The patient needs to take a deep breath and hold it while the kidney tissue is entered. When the needle pushes through the kidney to obtain tissue, the patient may feel a “pop” or pressure sensation. It is important to remain still and hold the breath until told to exhale. The breath usually needs to be held for 15 seconds or less. At least two needle “passes” are needed to obtain enough tissue for diagnosis.

Once enough kidney tissue is obtained, the needle is removed and a bandage is placed over the biopsy puncture site.

Is there anything special to do to prepare for the kidney biopsy? After the biopsy? Two weeks before the biopsy, you should avoid aspirin or over-the-counter medicines such as ibuprofen-type preparations (Motrin, Advil, Ibuprofen P. etc.) These medicines may change normal clotting of the blood and increase the risk of bleeding with biopsy. A urine culture is usually done before a biopsy to make sure the kidney is free of infection. The doctor will give the patient any other specific instruction when scheduling the biopsy date.

Kidney biopsies are usually done in the hospital followed by a period of observation (occasional overnight) to watch for complications after the procedure. The patient is admitted to the hospital on the day of the biopsy, and blood is checked for normal clotting. Often, the patient needs to skip the meal before the biopsy to prevent feeling sick to the stomach and throwing up during the procedure.

After the biopsy, you need to stay in bed for 6 to 12 hours, or as directed by the doctor. Your blood pressure and pulse are checked often to look for any signs of internal bleeding. Blood counts are also done. The patient may eat and drink fluids after the biopsy. If you have stable blood counts, blood pressure and pulses, you may be able to leave within 8 hours after the biopsy.

The doctor will advise you about physical activity and symptoms to look for after going home from the hospital. Heavy lifting, strenuous exercise and sexual intercourse should be avoided 7-10 days after the biopsy. If you are constipated, it is important that you do not strain to have a bowel movement. Ask your doctor to order a stool softener or laxative for you. Patients should call the doctor if any of the following occur:

- You have bloody urine.
- You are not able to pass urine.
- You have worsening pain at the biopsy site.
- You have a fever.
- You feel faint.

Is there anything else I should know? The risks of kidney biopsy should be discussed with the doctor before the procedure. As in other medical and surgical procedures, certain risks may occur in spite of efforts taken to prevent complications. Blood transfusions may be needed if serious bleeding occurs. Rarely, surgery is needed to repair a leaking blood vessel within the kidney. There is a very small chance (1 in 1,000 to 1 in 10,000) that someone may die as the result of a kidney biopsy.

How long will it take to get the results? Results of the kidney biopsy may be ready within one to two weeks after the procedure. The amount of time to get results depends on the various tests the doctor needs for diagnosis. The tissue is sent for several tests that tell the doctor what is causing the kidney disease. Generally, an appointment with the doctor 1-2 weeks after the biopsy is needed to discuss the results and treatment plan.

What is the National Kidney Foundation and how does it help? More than 20 million Americans have some form of kidney or urologic disease. Millions more are at risk. The National Kidney Foundation, Inc., a major voluntary health organization, is working to find the answers through prevention, treatment, and cure. Through its 52 affiliates nationwide, the foundation conducts programs in research, professional education, patient and community services, public education and organ donation. The work of the National Kidney Foundation is funded entirely by public donations.