

The Know-How of Renal Biopsy

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Biopsy is an examination of tissue removed from a living body to discover the presence, cause, or extent of a disease. A renal biopsy is a procedure used to extract kidney tissue for laboratory analysis. The word “renal” describes the kidneys, so a renal biopsy is also called a kidney biopsy. The test helps a doctor to identify the type of kidney disease a patient has, how severe it is, and the best treatment for it.

A kidney biopsy involves taking one or more tiny pieces (samples) of your kidney to look at with special microscopes. The microscopes make it possible to see the samples in greater detail.

The biopsy sample can be taken in two methods:

1. Percutaneous biopsy: a needle placed through the skin that lies over the kidney and guided to the right place in the kidney, usually with the help of ultrasound.
2. Open biopsy: the kidney sample is taken directly from the kidney during surgery.

The kidney sample is then sent to a doctor (pathologist) who looks at it with microscopes and checks for any signs of disease.

Why Renal Biopsy is required -

Some kidney complications can be detected by blood and urine tests, special tests sonogram and along with symptom of patient. But for certain patients with some types of kidney disease, and patients who have to undergo a kidney transplant, with improper functioning of the graft kidney a correct diagnosis can only be made with a Renal biopsy.

Precise reason to do a kidney biopsy is-

1. Nephrotic syndrome and glomerular disease which happens when the filtering units of the kidney are damaged
2. Blood in the urine

3. Protein in the urine
4. Uncharacteristic blood test results
5. Severe kidney disease with no clear cause

A Renal biopsy can help doctor understand:

- If a disease is getting better with treatment or if it is getting worse,
- know a problem that cannot be cured, but can be slowed down by other therapy
- How much permanent damage has happened in the kidney,
- Why a transplanted kidney is not working well
- Helps the doctor to decide on further treatment
- Presence of a kidney tumor
- If a certain treatment is hurting the kidneys

It is essential that the doctor prescribing the Renal Biopsy make the patients understand why the procedure is required and why it is necessary.

After the kidney sample is taken, it is sent to specially trained pathologists who will read and interpret your kidney biopsy. It often takes three to five days to get the full biopsy results. In some cases, you may have a partial or full report within 24 hours or less. A report given by the pathologist is important for Nephrologist to decide on the future line of treatment.

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