

Perspective

An overview on kidney disease

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DESCRIPTION

Kidney disease, also known as renal disease or nephropathy, is the injury or disease of the kidneys. The kidneys are two reddish-brown bean-shaped organs of vertebrates. They are found on the left and right sides of the retroperitoneal region and measure around 12 centimetres (4+12 inches) in length in adult people. Blood enters through the paired renal arteries and exits through the paired renal veins. The ureter, which is a tube that transfers ejected urine to the bladder, is found in each kidney. The nephritis is an inflammatory kidney illness that comes in a variety of forms depending on where the inflammation occurs. Blood tests can be used to identify inflammation.

Nephritis is a type of kidney inflammation that affects the glomeruli, tubules, and interstitial tissue that surrounds the glomeruli and tubules. It is a sort of nephropathy that comes in a variety of forms. Inflammation is a protective reaction involving immune cells, blood vessels, and molecular mediators that occurs when bodily tissues are exposed to hazardous stimuli such as pathogens, damaged cells, or irritants. The renal disease usually results in some loss of kidney function and can progress to kidney failure, which is the complete loss of kidney function. Renal failure is the final stage of kidney disease, and the only treatment options are dialysis or a kidney transplant.

Nephritic syndrome is a collection of symptoms that indicate nephritis, an inflammatory kidney disease. It is known as glomerulonephritis when it affects the glomerulus. Glomerulonephritis is characterized by glomerular basement membrane inflammation and weakening, as well as the presence of tiny pores in the glomerulus' podocytes. The term "nephrotic

syndrome" refers to a group of symptoms caused by kidney disease. Protein in the urine, low blood albumin levels, high blood lipids, and considerable edema are all examples of this. Other signs and symptoms include weight gain, fatigue, and frothy urine. Blood clots, infections, and high blood pressure are all possible complications.

The renal failure is the final stage of kidney disease, and the only treatment options are dialysis or a kidney transplant. The dialysis is a medical procedure. This is referred to as renal replacement therapy. When a patient with end-stage kidney disease has a kidney transplant, it is also known as a renal transplant. The organ transplantation is a medical technique that involves removing an organ from one body and transplanting it into the body of another to replace a damaged or missing organ.

Depending on the source of the donor organ, kidney transplantation is classed as deceased-donor living-donor transplantation. Living-donor kidney transplants are classified as either genetically linked (living-related) or non-related transplants, depending on whether the donor and receiver have a biological relationship.

The existence of symptoms and indicators, as well as measures utilizing urine tests, blood tests, and medical imaging, are all used to assess kidney function. The maintaining a person's fluid balance, maintaining an acid-base balance, regulating electrolytes such as sodium, potassium, and other electrolytes, clearing toxins, regulating blood pressure, regulating hormones such as erythropoietin, and activation of vitamin D are all functions of a healthy kidney.

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