

Glomerulonephritis: Acute or Chronic Kidney Disorder

Fernando de Vriese*

Department of Nephrology and Infectious Diseases, Ghent University, Ghent, Belgium

DESCRIPTION

Glomerulonephritis is a condition in which the small filters in the kidneys become inflamed (glomeruli). Glomeruli remove excess fluid and waste from the bloodstream, which then exits the body as urine. The glomerulus is the filtration unit of the kidney. There are thousands of glomeruli in each kidney. The glomeruli aid in the removal of toxic substances from the body. Glomerulonephritis can strike suddenly (acute) or slowly (chronic). The specific source of this illness is frequently unknown. Glomerulonephritis can occur on its own or as part of a more serious condition like lupus or diabetes. Glomerulonephritis can cause kidney damage if the inflammation is severe or lasts for a long time. The signs and symptoms of glomerulonephritis differ based on whether it is acute or chronic glomerulonephritis, as well as the reason. Any signs or symptoms of a chronic illness may not be noticeable. The results of a simple urine test may be the first clue that something is amiss (urinalysis). Glomerulonephritis disrupts the ability of nephrons to efficiently filter blood. As a result of the filtering breakdown many things take place such as wastes or poisons build up in the bloodstream, essential minerals and nutrients are poorly regulated, Red blood cell loss is a condition that occurs when the body's red blood cells growth is low, proteins in the blood are lost. The type of glomerulonephritis decides the treatment options. Glioblastoma is a famous kind of glomerulonephritis that often goes undetected.

However there are many well-known symptoms to identify this disease. It includes blood in the urine can cause it to appear brown, pink, or red, Fatigue, nausea, rash, Shortness of breath or hypertension (high blood pressure), Inflammation of the joints or the abdomen (belly area), Peeing less or more frequently than usual, Legs and/or facial swelling, Foamy urine are all possible symptoms.

Test to diagnose glomerulonephritis

Urine test: This test will identify whether patient's urine contains protein or blood.

Blood Test: The level of creatinine (a waste product filtered by the kidneys) in a sample of blood will be measured in this test.

Kidney biopsy: A healthcare expert will use a needle to retrieve a small amount of kidney tissue during a kidney biopsy. A microscope is used to inspect the tissue.

Ultrasound: An ultrasound examines the size of kidneys, searches for obstructions, and diagnoses any issues. Glomerulonephritis can be caused on by issues with the immune system. Certain cancers, such as gastric cancer, lung cancer, and chronic lymphocytic leukemia, are linked to glomerulonephritis.

Problems related to glomerulonephritis

Glomerulonephritis can lead to a variety of problems. Some of them are as follows:

Acute kidney failure: Kidney failure that is severe. Acute kidney failure is characterized by a rapid loss of kidney function, which is frequently linked to an infectious aetiology of glomerulonephritis. If not treated promptly using an artificial filtering system, the accumulation of waste and fluids can be life-threatening (dialysis). After healing, the kidneys usually resume normal function.

Chronic kidney disease: Chronic renal disease is a condition that affects the kidneys. Chronic inflammation damages the kidneys over time and causes them to lose function. Renal damage or decreased function for three months or longer is considered chronic kidney disease. End-stage renal disease, which necessitates dialysis or a kidney transplant, can develop from chronic kidney disease.

High blood pressure: Blood pressure that is too high. Increased blood pressure can be caused by inflammation or scarring of the glomeruli.

Nephrotic syndrome: Nephrotic syndrome is characterized by an excess of blood protein in the urine and an insufficient amount

Correspondence to: Fernando de Vriese, Department of Nephrology and Infectious Diseases, Ghent University, Ghent, Belgium, E-mail: Vriese.fernando@mayo.edu

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in the bloodstream. These proteins help to keep fluids and cholesterol levels in check. High cholesterol, high blood pressure, and swelling (edema) of the face, hands, feet, and belly are all symptoms of a reduction in blood proteins. Nephrotic syndrome can induce a blood clot in a kidney blood artery in rare cases.

Treatment of glomerulonephritis

Treatment is determined by the cause of glomerulonephritis and the extent of kidney filter damage. Patient has to make dietary changes to consume less protein, salt, and potassium. Prednisone and other corticosteroids can be used. Dialysis is a procedure that cleans the blood, removes excess fluid, and regulates blood pressure. To minimize edema, diuretics (water tablets) are also used. If glomerulonephritis is caused by an immune system problem, immunosuppressant may be used as a treatment. Angiotensin-Converting Enzyme (ACE) inhibitors and angiotensin II receptor blockers are examples of blood pressure-

lowering medications. Plasmapheresis is a technique used for filtering proteins from the blood. There is no way to prevent glomerulonephritis that has been come to light yet. Some techniques may be beneficial like controlling High blood pressure with a low-salt diet, exercise, and medication. Consulting a healthcare provider whenever there are symptoms of glomerulonephritis is way of treating this early. Glomerulonephritis affects various people in different ways. Some cases are self-resolving and do not require treatment. Some people find that therapy helps them maintain or improve their kidney function. Get kidneys tested on a regular basis if there are any symptoms of have glomerulonephritis. To manage the problem, follow medical advice and take medicines as suggested by doctors. Glomerulonephritis is commonly caused by infections. If patient notices that his /her pee is frothy or a different colour, quickly they should take help of doctors. Certain measures can aid in the maintenance of kidneys and the prevention of renal failure.