

The Measures and Activites of Kidney Disorders in Human Body

Alex Abdu*

Department of Internal Medicine, University of Ebonyi, Ebonyi State, Nigeria

DESCRIPTION

The kidneys are vital organs that play a crucial role in maintaining our overall health. They are responsible for filtering waste products and excess fluids from the blood, regulating electrolyte balance, and helping control blood pressure. When the kidneys don't function properly, it can lead to various kidney disorders, which can have serious consequences for our well-being. In this article, we will explore the common kidney disorders, their causes, symptoms, and available treatment options.

Common kidney disorders

Chronic Kidney Disease (CKD): CKD is a progressive condition in which the kidneys gradually lose their ability to function over time. It often develops slowly and may go unnoticed in its early stages. Common causes of CKD include high blood pressure, diabetes, and certain genetic conditions. Symptoms of CKD include fatigue, swelling, high blood pressure, and changes in urination patterns.

Kidney stones: Kidney stones are hard deposits of minerals and salts that can form in the kidneys. They can cause excruciating pain when they pass through the urinary tract. Dehydration, dietary factors, and certain medical conditions can contribute to the development of kidney stones. Symptoms include severe back or abdominal pain, blood in the urine, and frequent urination.

Polycystic Kidney Disease (PKD): PKD is a genetic disorder that causes numerous fluid-filled cysts to form in the kidneys. These cysts can gradually enlarge, impairing kidney function and leading to complications such as high blood pressure and kidney failure. PKD can be asymptomatic initially but may cause pain in the back or sides, blood in the urine, and urinary tract infections as it progresses.

Glomerulonephritis: This term encompasses a group of kidney disorders characterized by inflammation of the glomeruli, which are the tiny filters in the kidneys. Various factors, including infections, autoimmune diseases, and certain medications, can

trigger glomerulonephritis. Symptoms may include blood in the urine, proteinuria (excessive protein in the urine), and swelling.

Acute Kidney Injury (AKI): AKI, formerly known as acute renal failure, is a sudden and severe decrease in kidney function. It can result from various factors such as dehydration, infections, medications, and trauma. Symptoms of AKI include decreased urine output, swelling, confusion, and nausea.

Causes of kidney disorders

Kidney disorders can have a range of causes, and often, multiple factors contribute to their development. Some common causes include

High blood pressure (Hypertension): High blood pressure can damage the blood vessels in the kidneys, reducing their ability to filter waste and fluids properly.

Diabetes: Uncontrolled diabetes can lead to diabetic nephropathy, a condition where high blood sugar levels damage the kidneys' filtering units.

Genetic factors: Some kidney disorders, like PKD, are inherited and result from specific genetic mutations passed down through families.

Infections: Certain infections, such as Urinary tract Infections (UTIs) or streptococcal infections, can lead to kidney inflammation and damage.

Autoimmune diseases: Conditions like lupus and Goodpasture syndrome can trigger the immune system to attack the kidneys.

Dehydration: Chronic dehydration can increase the risk of kidney stones and kidney injury.

Symptoms of kidney disorders

The symptoms of kidney disorders can vary depending on the specific condition and its severity. However, some common signs to watch out for include

Changes in urination: This may include frequent urination, difficulty urinating, blood in the urine, or foamy urine.

Correspondence to: Alex Abdu, Department of Internal Medicine, University of Ebonyi, Ebonyi State, Nigeria, E-mail: abdu_alex@ebnoyedu.com

Received: 29-Aug-2023, Manuscript No. ACDR-23-26534; **Editor assigned:** 01-Sep-2023, PreQC No. ACDR-23-26534 (PQ); **Reviewed:** 15-Sep-2023, QC No. ACDR-23-26534; **Revised:** 22-Sep-2023, Manuscript No. ACDR-23-26534 (R); **Published:** 29-Sep-2023, DOI: 10.35248/ACDR.23.7.198

Citation: Abdu A (2023) The Measures and Activites of Kidney Disorders in Human Body. Acute Chronic Dis. 7:198.

Copyright: © 2023 Abdu A. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Swelling: Kidney disorders can lead to fluid retention, resulting in swelling in the legs, ankles, feet, or face.

Fatigue: As kidney function declines, the body may become anemic, leading to fatigue and weakness.

High blood pressure: Kidney disorders can contribute to elevated blood pressure, which can further damage the kidneys.

Pain: Some kidney disorders, like kidney stones and PKD, can cause pain in the lower back or sides.

Treatment options

The treatment of kidney disorders depends on the specific condition, its underlying causes, and its stage of progression. Here are some common treatment approaches.

Medications: Depending on the diagnosis, medications may be prescribed to manage symptoms, control blood pressure, or treat underlying conditions like diabetes.

Dietary changes: Patients with kidney disorders may need to modify their diet to limit salt, protein, and phosphorus intake to reduce the workload on the kidneys.

Lifestyle modifications: Lifestyle changes such as maintaining a healthy weight, staying hydrated, and quitting smoking can help improve kidney health.

Dialysis: In advanced cases of kidney disease or failure, dialysis may be necessary. This process involves using a machine to filter waste and excess fluids from the blood.

Kidney transplant: In cases where kidney function is severely impaired, a kidney transplant may be the best option. This involves replacing the damaged kidney with a healthy one from a donor.

Kidney disorders are a diverse group of conditions that can have significant consequences for a person's health. Early detection and appropriate management are essential in preventing complications and preserving kidney function. If you experience any of the symptoms associated with kidney disorders, it is crucial to consult a healthcare professional for a thorough evaluation and diagnosis. With timely intervention and the right treatment, many individuals with kidney disorders can lead healthy and fulfilling lives.