

# Chronic Kidney Diseases (CKD)

Hazel Grace<sup>†</sup>

## Editorial

Chronic kidney disease, commonly known as chronic kidney failure, is a condition in which the kidneys gradually lose function. Wastes and surplus fluids are filtered from your blood and expelled as urine by your kidneys. When chronic kidney disease progresses, your body might accumulate harmful quantities of fluid, electrolytes, and wastes. You may have few indications or symptoms in the early stages of chronic renal disease. Chronic renal disease may not be seen until your kidney function has deteriorated severely. Chronic kidney disease treatment focuses on delaying the course of kidney damage, which is usually accomplished by addressing the underlying cause. Without mechanical filtering (dialysis) or a kidney transplant, chronic kidney disease can proceed to end-stage kidney failure, which is fatal.

## Cause

Chronic kidney disease develops when a disease or condition inhibits kidney function for months or years, causing kidney damage to deteriorate. Diabetes and high blood pressure are the two most common causes of chronic kidney disease, accounting for up to two-thirds of cases. When your blood sugar levels are too high, diabetes damages several organs in your body, including your kidneys and heart, as well as your blood vessels, nerves, and eyes. When the pressure of your blood against the walls of your blood vessels rises, you have high blood pressure, or hypertension. High blood pressure, whether uncontrolled or poorly regulated, is a primary cause of heart attacks, strokes, and chronic

renal disease. High blood pressure can also be a symptom of chronic renal disease.

Some of the major conditions that affects the kidney:

- Glomerulonephritis; This disorder is the third most common type of severe kidney disease. In this, Inflammation and damage to the kidney's filtering units are caused by a number of disorders.
- Polycystic kidney disease; In this a large cyst is formed inside the kidney which eventually damages the cells in its vicinity.
- Some diseases like as Lupus which affect the body's immune system.
- Urinary infections, kidney stones, tumors etc.

## Treatments

**Reduce high blood pressure:** High blood pressure might worsen in those who have kidney disease. Your doctor may prescribe medications to reduce your blood pressure and preserve kidney function, such as angiotensin-converting enzyme (ACE) inhibitors or angiotensin II receptor blockers. Because high blood pressure drugs can reduce kidney function and alter electrolyte levels at first, you may require frequent blood tests to keep track of your progress. A diuretic (water pill) and a low-salt diet are likely to be recommended by your doctor.

**Consuming less proteins:** Your body produces waste products when it consumes protein from food, which your kidneys must filter from your blood. Your doctor may advise you to eat less protein to lessen the amount of work your

Editorial Office, International Journal of Clinical Skills, London, United Kingdom, [ijclinicalskill@journalres.com](mailto:ijclinicalskill@journalres.com)

<sup>†</sup>Author for correspondence: Hazel Grace, Editorial Office, International Journal of Clinical Skills, London, United Kingdom, Email: [ijclinicalskill@journalres.com](mailto:ijclinicalskill@journalres.com)

kidneys have to do. Your doctor may also refer you to a dietician who may advise you on how to reduce your protein intake while maintaining a balanced diet.

**Dialysis:** When your kidneys are no longer able to do so, dialysis is used to eliminate waste products and excess fluid from your blood. A machine separates waste and extra fluids from your blood during hemodialysis. A narrow tube (catheter) put into your belly fills your abdominal cavity with a dialysis solution that absorbs waste

and excess fluids during peritoneal dialysis. The dialysis fluid drains from your body over a period of time, carrying the waste with it.

**Kidney transplant:** A kidney transplant is when a healthy kidney from a donor is surgically implanted into your body. Kidneys can be transplanted from either deceased or living donors. To prevent your body from rejecting the new organ, you'll need to take drugs for the rest of your life. A kidney transplant does not require you to be on dialysis.