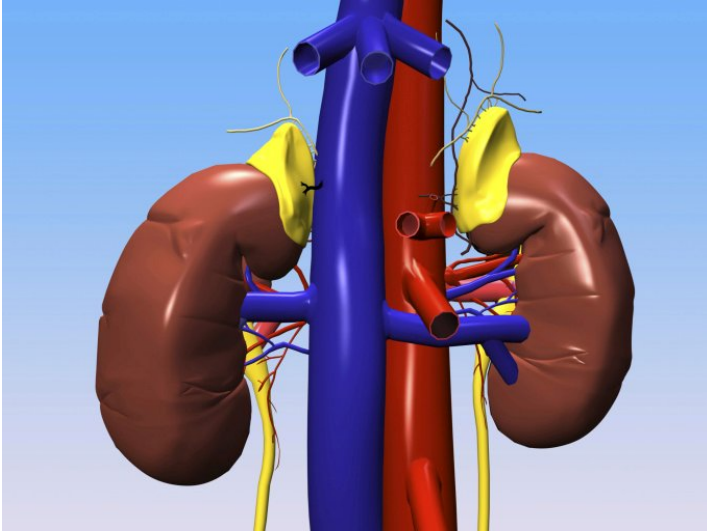


Renal failure



Renal failure refers to any acute or chronic loss of kidney function. Terminal kidney disease (TKD) indicates total or near-total permanent kidney failure (permanent loss of kidney function). Kidney function can be lost quickly in the course of days or weeks or can deteriorate slowly and gradually over the years.

Acute renal failure

Various forms of kidney disease responsible for very fast kidney function deterioration exist. Post-streptococcal glomerulonephritis, for example, can cause serious symptoms (hematuria, proteinuria and edema) in a period of 2 to 3 weeks after a streptococcal bacteria infection has appeared in the throat (streptococcal pharyngotonsillitis) or on the skin (streptococcal cellulitis). The patient may need to undergo dialysis to replace kidney function. Fast loss of kidney function is given the name of acute renal failure (ARF). Although ARF can be potentially fatal, kidney function tends to be restored once the cause of the renal failure is treated. In many patients, ARF is not associated with any permanent damage. However, some patients may recover from ARF and subsequently suffer from chronic renal failure (CRF).

Chronic kidney failure

Most kidney diseases progress gradually and often do not cause symptoms for many years. CRF is slow and gradual loss of kidney function. Some forms of CRF can be controlled or their progression can be delayed, but CRF cannot be cured. Partial loss of kidney function appears when a part of the patient's nephrons (the kidney's filtering units) stops working and cannot be repaired. In most cases CRF leads to terminal kidney disease (TKD).

Terminal kidney disease

A patient suffering from TKD must undergo dialysis to stay alive. Hemodialysis is a treatment in which the blood is removed from the body, wastes are eliminated from the blood and the filtered body is returned to the body. Peritoneal dialysis is a treatment in which a catheter is inserted into the abdominal cavity, a dialysis solution is placed to eliminate wastes and then the liquid containing the wastes is drained through the catheter to finally expel them. Patients may also undergo a transplant and receive a new kidney to replace the diseased kidneys. Patients with CRF who are nearing the TKD stage should obtain all the information possible about their treatment options so that when the time comes they can make a well-informed decision. With the help of dialysis or a transplant, many people continue enjoying a full and productive life after progressing to the TKD stage.