

## Glossary of Medical Terminology

**Abdominal Cavity:** The area in the lower part of the trunk of the body that contains the urinary and digestive systems and is covered by the peritoneal membrane.

**Acute:** Short duration or onset. Acute kidney failure requires short term treatment but is often reversible.

**Acute Dialysis:** Emergency or temporary dialysis provided to patients suffering from acute (temporary) kidney failure or to patients with chronic kidney failure who have been admitted to the hospital.

**Acute Kidney Failure:** A sudden onset of kidney failure resulting from disease, injury, or other insult to the kidney.

**Acute Tubular Necrosis (ATN):** Sudden failure of one's own kidney(s) or a transplant to function due to impaired blood supply or chemical injury.

**Adequacy:** Enough dialysis to avoid symptoms of uremia. (See Kt/V and URR).

**Albumin:** A type of protein in the blood.

**Anemia:** A condition caused by a very low number of red blood cells in the body. Anemia causes paleness, weakness, and fatigue.

**Anticoagulants:** Medicines used to help prevent blood clotting.

**Antiseptic:** Chemical that stops the growth of bacteria or germs; however, it does not necessarily destroy them.

**Arterial line:** Tubing connected to a needle inserted into the hemodialysis patient's vascular access. During dialysis, the arterial line carries blood away from the body and into the dialyzer (artificial kidney) on the dialysis machine.

**Artery:** Blood vessel carrying blood under pressure away from the heart to the various parts of the body. Part of the circulatory system.

**Artificial Kidney Machine:** Hemodialysis machine. A machine that circulates a patient's blood through a cleansing fluid in order to maintain the chemical and fluid balance of the body.

**Aseptic:** Free of bacterial or infectious organisms. Sterile.

**Bacteria:** Small one-celled organisms found everywhere. Many kinds are harmless or beneficial; certain ones cause infections and may be dangerous.

**Bilateral nephrectomy:** Removal of both kidneys

**Bladder:** The sac in which urine produced by the kidneys is collected and stored until the urine is released from the body.

**Blood Cells:** The single cells of blood. Red blood cells are vital for moving oxygen from the lungs to the body; white blood cells act to fight infection and destroy bacteria.

**Blood Pressure:** Pressure of the blood flowing against the blood vessels.

**Blood Urea Nitrogen (BUN):** Urea is a waste product of protein breakdown. BUN is a chemical measurement of the amount of nitrogen, which comes from urea, which is present in the blood. The level of your BUN will help determine whether you are eating too much or too little protein.

**CAPD:** Continuous Ambulatory Peritoneal Dialysis (see Peritoneal Dialysis) CAPD is a cleansing process that is repeated four or five times a day.

**Calcium (Ca):** A mineral found in the blood that is important to the body's functioning and for healthy bones.

**Catheter:** A plastic or rubber tube through which fluids enter or leave the body. A Foley catheter is used to withdraw urine from the bladder.

**CCPD:** Continuous Cycling Peritoneal Dialysis. Like CAPD, dialysate fluid is drained into the abdomen through a catheter. Instead of changing the fluid several times each day as in CAPD, a machine changes the fluid several times each night while the patient sleeps.

**Chronic:** A disease showing little change or slow progress and long duration. Chronic kidney disease is not reversible and requires lifelong treatment.

**Chronic Kidney Disease (CKD):** The slow destruction of normal kidney tissue that occurs over months or years. Coagulation: Formation of a blood clot.

**Conductivity:** Measurement of the electrical activity of the dialysate concentration.

**Continuous Ambulatory Peritoneal Dialysis (CAPD):** A type of peritoneal dialysis performed by the patient on a continuous basis without major equipment.

**Continuous Cyclic Peritoneal Dialysis (CCPD):** A kind of peritoneal dialysis performed by the patient using a machine for eight to twelve hours every night.

**Contaminate:** Make dirty, impure, or no longer sterile.

**Creatinine:** One of the waste products of the body used as a measurement for kidney function. It is produced at a fairly constant rate in the body and is not influenced by diet. The level of creatinine corresponds to the degree of kidney disease.

**Dialysate:** A chemical solution, very similar in content to the blood plasma, used in hemodialysis and peritoneal dialysis treatments.

**Dialysate Delivery System:** That part of the hemodialysis machine that provides a steady flow of dialysate to the artificial kidney during hemodialysis.

**Dialysis:** The process of keeping the chemical balance of the blood when the kidneys have failed. Waste products and excess fluids are removed from the blood by allowing them to pass out of the blood through a special membrane in the artificial kidney.

**Dialysis Center/Facility:** A place supplying different types of dialysis services. It must meet the Federal requirements of certification as a kidney dialysis center.

**Dialysis Shift:** The average time required to dialyze a group of patients. This time includes both the setup and cleanup of the equipment. The dialysis shift may also be referred to as a patient shift.

**Dialysis Station:** The equipment and space required to perform a single dialysis treatment.

**Dialyzer:** The filter on the dialysis machine that removes waste products and fluid from the blood. Also called the artificial kidney.

**Disequilibrium:** Headaches and dizziness during dialysis. It can occur if dialysis removes a lot of fluid very quickly, or if blood pressure drops.

**Dry weight:** A patient's weight without excess fluid.

**Edema:** Collection of fluid in the body tissue resulting in swelling.

**Electrolytes:** Substances found in the bloodstream that are kept in balance by diet, medicines and dialysis. Examples include sodium (Na<sup>+</sup>) and potassium (K<sup>+</sup>).

**End Stage Renal Disease (ESRD):** Terminology used by CMS for that stage of chronic kidney disease when dialysis or transplant becomes necessary for survival.

**Erythropoietin (EPO):** A substance produced by the kidneys that stimulates the bone marrow to produce red blood cells. Extracorporeal: Pertaining to circulation outside the body.

**Exchange:** The process of draining used peritoneal dialysate from the abdomen and putting in fresh dialysate. An exchange may be done by the patient or by a cycling machine.

**Fibrin:** Protein product sometimes seen in blood or in peritoneal fluid.

**Fistula:** A connection made between an artery and a vein in an arm or leg. A fistula that is made through surgery causes the vein to become larger so that needles can be easily inserted to connect the patient to the hemodialysis machine.

**Glomerulonephritis:** A disease involving inflammation of the tissues of the kidneys.

**Glomerulus:** Special tissue that serves as a filter in the formation of urine.

**Glucose:** The amount of sugar in the blood.

**Gore-Tex/Impra:** A synthetic vessel surgically grafted to allow access to the blood circulation.

**Graft:** A transplanted organ or vessel. An access that is made by connecting one end of a piece of artificial vein to the patient's vein and the other end to the patient's artery. The graft is a larger vessel with the rapid blood flow needed for efficient hemodialysis.

**Hematocrit (Hct):** Percentage of red blood cells to the total blood volume.

**Hematoma:** Accumulation of blood that has escaped from a blood vessel into surrounding tissue. Bruise.

**Hemodialysis:** The process by which the blood is taken outside the body to an artificial kidney where waste products and extra fluids are removed. The filtered blood is then returned to the body.

**Hemoglobin (Hgb):** The part of the red blood cell that carries oxygen.

**Heparin:** Medication that slows the natural clotting process.

**Hepatitis:** Inflammation of the liver, usually due to a viral infection.

**Home Dialysis:** The patient and a helper are trained to operate the dialysis equipment and perform the dialysis treatments in the home.

**Hyper-:** Prefix meaning higher than normal.

**Hyperkalemia:** A high level of potassium in the blood that can cause irregular heartbeat and ultimately cardiac arrest. It is a potential problem for people on dialysis.

**Hypertension:** High blood pressure. Some cases of hypertension can result in kidney damage.

**Hypo-:** Prefix meaning lower than normal.

**Hypotension:** Low blood pressure due to any cause.

**Immunosuppressive Medications:** Drugs taken to help prevent rejection of a transplanted kidney. Also cause weakening of the body's system of defense against infection.

**In-center Dialysis:** Facility-based treatments providing full care.

**Inflammation:** A reaction by a part of the body to injury, infection or irritation. Symptoms include redness, pain, heat, swelling or loss of function to the area.

**Infuse:** Introduce a liquid into something.

**In-patient Dialysis:** Dialysis treatments administered to those patients who have been admitted to the hospital. Also called acute dialysis.

**Intermittent Peritoneal Dialysis (IPD):** A type of peritoneal dialysis performed three to four times weekly for a total of 36 to 42 hours per week. This treatment requires the use of a machine and is usually done by health professionals.

**Kidney:** One of the two organs located at the upper back of the abdominal cavity, one on each side of the spinal column. One of their functions is to maintain the chemical balance of the body. Another is to remove excess fluid from the body.

**Kidney Transplant:** The surgical removal of a kidney from the body of one person to the abdomen of another person to replace kidney function.

**Kt/V:** A formula for prescribing adequate dialysis and measuring if the patient is receiving enough dialysis.

**Leukocyte:** White blood cell.

**Lymphocyte:** A special kind of white blood cell.

**Metabolic End Products:** Chemicals produced by normal body functions that are not needed by the body.

**Metabolism:** The way the body breaks down food into simpler materials or waste matter.

**Modality:** A type or mode of treatment. The modalities of treatment for individuals with end-stage kidney disease include hemodialysis, peritoneal dialysis, and transplant.

**Monitor:** A mechanical or electrical device for checking and recording conditions of patient and/or equipment.

**Nephrologist:** Doctor (physician) who specializes in kidney diseases and their treatment.

**Nephron:** The part of the kidney that acts to maintain the body's chemical balance. There are about one million nephrons in each kidney.

**Neuropathy:** Refers to any disease of the nerves. Sensitivity of the nerves is usually decreased as a result. Occlude: To clamp off, to kink, or to stop the flow.

**Osmosis:** The movement of a fluid of low concentration through a semipermeable membrane to a fluid or area with a higher concentration.

**Osteodystrophy:** Defective bone formation.

**Out-Patient Dialysis:** Dialysis done on an out-patient basis at a renal dialysis center or facility. Patent: Unobstructed, open.

**Parathyroid Gland:** One of several small endocrine glands located in or around the thyroid gland in the neck. These glands secrete a hormone that regulates calcium-phosphorus balance.

**Parathyroid Hormone (PTH):** A hormone produced by the parathyroid glands that helps keep the bones healthy.

**Peritoneal Dialysis:** A method of cleansing the blood by putting a special fluid solution called dialysate in the peritoneum; wastes and fluid from the blood pass through the membrane into the dialysate.

**Peritoneum:** The membrane lining the abdominal cavity. It surrounds the digestive organs in the body.

**Phlebitis:** Inflammation involving the walls of a vein.

**Phosphorus:** A mineral found in the blood that is important for energy production and bone health.

**Plasma:** The liquid part of blood.

**Polycystic Kidney Disease:** A hereditary disease involving cysts that destroy functioning kidney tissue over a period of twenty to forty years.

**Potassium (K+):** A mineral necessary to the body but harmful when out of balance.

**Prealbumin:** A type of protein in the blood.

**Pulmonary Edema:** A condition in which the body holds extra fluid in the lungs. It causes shortness of breath.

**Quality Improvement Performance Assessment (QAPI):** The systematic way the dialysis interdisciplinary team plans to improve patient outcomes and reduce medical errors based on clinical data.

**Rehabilitation:** A return to stable health, a positive outlook, and enjoyable activities that make people feel better physically and mentally. Renal: Having to do with the kidneys.

**Kidney Transplantation Center:** A hospital approved to furnish transplantation and other medical and surgical specialty services required for the care of the transplant patient.

**Renin:** A substance produced by the kidney which acts to raise the blood pressure.

**Semipermeable Membrane:** A membrane such as cellophane that permits the passage of only certain size particles through it.

**Septicemia:** Presence of harmful microorganisms in the bloodstream or other tissues.

**Serum:** The clear liquid that separates from the blood when it is allowed to clot.

**Shunt (Scribner Shunt) (External AV Shunt):** An artery and a vein connected by external tubing to allow repeated access to the bloodstream.

**Sodium (Na<sup>+</sup>):** A mineral that helps control fluid content in the body.

**Sterile:** Completely free of any living microorganisms; aseptic.

**Subcutaneous (Sub-q):** Underneath the skin.

**Systemic:** Affecting the entire body.

**Tissue Typing:** A blood test used to determine the compatibility between an organ donor and the recipient for a transplant.

**Trauma:** Injury or wound.

**Toxins:** Chemical waste products produced by the metabolic processes of the body, such as digesting food, breathing, and mental and physical activity.

**Ultrafiltration:** The method used to remove excess fluids from the blood during dialysis.

**Urea:** A waste product formed by the breakdown of protein in the body.

**Uremia:** Toxic condition associated with loss of kidney function and the retention of metabolic waste products in the blood. The symptoms are weakness, nausea, itching, sleep disturbances, headaches, impaired memory and confusion.

**Ureter:** One of two tubes within the body that carries urine from the kidneys to the bladder.

**Urethra:** The tube through which urine is discharged from the bladder.

**Urologist:** A doctor (physician) who diagnoses and treats disorders of the urinary system.

**URR:** Urea Reduction Ratio. A formula to measure the adequacy of dialysis.

**Vein:** Blood vessel carrying blood to the heart from the various parts of the body. Part of the circulatory system.

**Venous:** Anything related to a vein.

**Venous line:** In hemodialysis, the tubing that returns the clean blood from the dialyzer back to the patient through the access.