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Dialysis

National Diabetes Information Clearinghouse (NDIC)

Definitions

Kidney

Defined by National Diabetes Information Clearinghouse (NDIC)

Dialysis solution

Defined by National Diabetes Information Clearinghouse (NDIC)

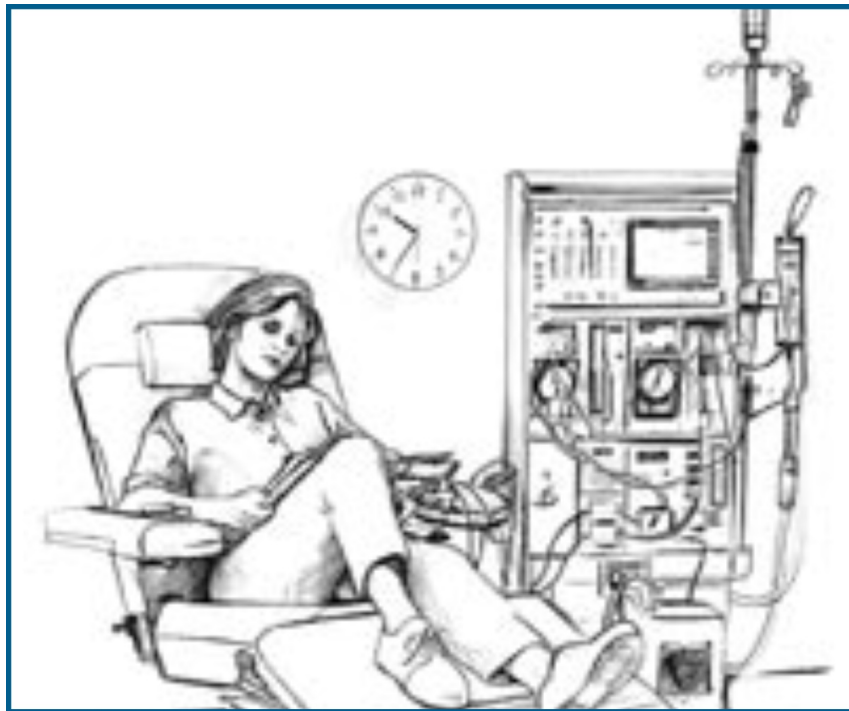
Source

National Diabetes Information Clearinghouse (U.S.). (2009). *The diabetes dictionary*. [Bethesda, Md.]: U.S. Dept. of Health and Human Services, National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases, National Diabetes Information Clearinghouse.

The process of cleaning wastes from the blood artificially. This job is normally done by the **kidneys**. If the kidneys fail, the blood must be cleaned artificially with special equipment.

The two major forms of dialysis are **hemodialysis** and **peritoneal dialysis**.

- **hemodialysis**: the use of a machine to clean wastes from the blood after the **kidneys** have failed. The blood travels through tubes to a dialyzer, a machine that removes wastes and extra fluid. The cleaned blood then flows through another set of tubes back into the body.



Hemodialysis

- **peritoneal dialysis**: cleaning of the blood by using the lining of the abdominal cavity, or belly, as a filter. A cleansing liquid, called **dialysis solution**, is drained from a bag into the abdomen. Fluid and wastes flow through the lining of the abdominal cavity and remain “trapped” in the dialysis solution. The solution is then drained from the abdomen, removing the extra fluid and wastes from the body. The two main types of peritoneal dialysis are **continuous ambulatory peritoneal dialysis** and **continuous cycling peritoneal dialysis**.
 - **continuous ambulatory peritoneal dialysis (CAPD)**: a form of peritoneal dialysis that needs no machine. With CAPD, the blood is always being cleaned. The **dialysis solution** passes from a plastic bag through a catheter and into the abdomen. The dialysis solution stays in the abdomen with the catheter sealed. After several hours, the person using CAPD drains the solution back into a disposable bag. Then the person refills the abdomen with fresh solution through the same catheter to begin the cleaning process again.
 - **continuous cycling peritoneal dialysis (CCPD)**: a form of peritoneal dialysis that uses a machine. This machine automatically fills and drains the **dialysis solution** from the abdomen. A typical CCPD schedule involves three to five exchanges during the night while the person sleeps. During the day, the person using CCPD performs one exchange, draining the dialysis solution after an entire day.