Dialysis (Renal Dialysis)

Dialysis is a *therapy* (treatment) which removes the toxic wastes from the body when the kidneys fail and cannot do their job of removing these toxic wastes. There are two types of dialysis:

- **HEMODIALYSIS:** In hemodialysis blood is pumped from the body through a filter. The blood is cleaned of waste products when the blood goes through this filter. Cleaned blood is then returned to the arm. This is similar to running your gas through a filter to filter out dirt. Hemodialysis is performed in a dialysis center for 4 hours, three times a week. Dialysis is performed through an arteriovenous (a v) access, (blood vessel access). The main advantage is no training is required. Disadvantages include graft failure and lack of freedom, as you must remain relatively near a dialysis center. Your caregiver can explain this to you.
- **PERITONEAL DIALYSIS:** In peritoneal dialysis the body's own membranes are used as filters. Fluid is drained in and out of the *abdomen* (belly). This replaces the kidneys in getting rid of the body poisons. Advantages are that it can be done at home with careful technique. It allows more freedom and less needle sticks. Disadvantages are *peritonitis* (this is an inflammation of the inside of your abdomen) and membrane failure. Your caregiver can explain this to you.

STARTING DIALYSIS

Depending on how well your kidneys are working will be the basis for deciding when you should start dialysis. Your caregiver can explain this to you.

PROBLEMS IN DIALYSIS

- You may be given Erythropoietin to help *anemia* (low red blood cells). Having enough red cells are important to protect the heart, and maintain energy. Erythropoietin is a hormone which helps the body make more red blood cells. This helps prevent anemia. Red blood cells carry oxygen to your cells.
- The better your dialysis, the more waste products are removed, and the better you feel. This is known as dialysis adequacy. Dialysis adequacy is measurable. Know your values. Your caregiver will help you with this.
- Albumin is a protein in the blood and is a marker of nutrition. When your albumin is low it may also mean that you are not adequately *dialyzed* (cleaned).
- Start early to control your blood pressure. High blood pressure damages your heart and vessels. It is important for dialysis patients to exercise as much as possible.
- A high pressure in your graft arm may mean that the vessel leading from your graft is narrowed, and that repair may be needed to help protect your graft. The pressure in this port is known as the access pressure.
- Some blood filters used in dialysis are more *compatible* (better matched with you) than others. Your caregiver will help you with this.
- You need sufficient amounts of peritoneal dialysis in order to feel well. This is known as peritoneal dialysis adequacy.
- Heart attacks and vessel disease are common in kidney patients. Keep your cholesterol under control. Exercise regularly or as directed.
- Infection is common in dialysis patients. Keep your graft site clean, and note any sign of *inflammation* (redness), tenderness, fever, chills, sweats or weakness. These should be reported to your caregiver.

Most of this information is courtesy of the NIH.
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