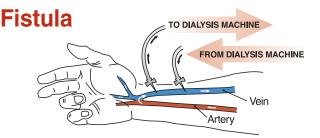
Hemodialysis Vascular Access

Hemodialysis cleans your blood through a fistula, graft or catheter. If you have kidney failure, one of these will be your **LIFELINE!** Talk with your doctor to decide which type of vascular access is best for you.





A fistula directly connects an artery to a vein. The vein stretches over time, allowing needles to be put in it.

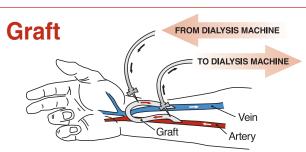
Fistulas are the gold standard for hemodialysis.

Advantages

- Permanent
- Beneath the skin
- ✓ Lasts longest, up to 20 years
- Provides greater blood flow for better treatment
- Fewer infections & other complications
- Fewer hospitalizations
- Better survival (lower risk of dying than patients with catheters)

Disadvantages

- X May not mature/develop
- X Not possible for all patients
- X Usually cannot be used for at least 6-8 weeks



A graft is a tube, usually made of plastic, that connects an artery to a vein, allowing needles to be put in it. Grafts are the second best way to get access to the bloodstream for hemodialysis.

Advantages

- Permanent
- Beneath the skin
- May be used after 2 weeks, in some cases
- May work in patients with poor veins

Disadvantages

- X Increased hospitalizations
- X Increased risk for clotting
- X Increased risk for serious infections
- X Increased risk for other complications and repair procedures
- X Does not last as long as a fistula

Catheter -

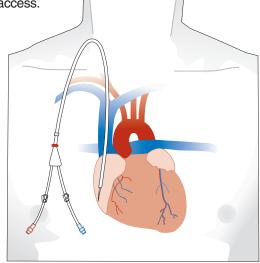
A catheter is a tube inserted into a vein in the neck or chest to provide vascular access for hemodialysis. The tip rests in your heart. It is usually a **temporary** access. It is the third choice for getting access to the bloodstream for hemodialysis. For some patients it is the only choice and it will need to be used as a permanent access.

Advantages

Can be used immediately after placement

Disadvantages

- X Higher infection rates, which can be very serious or fatal
- X Increased hospitalizations
- X Does not last long, usually less than one year
- X May require longer treatment times
- X Prolonged use may lead to inadequate dialysis
- X Cannot shower without special appliance
- X High rate of clotting requiring frequent procedures
- X Risk of destroying important vein



Adapted with modifications from a flyer produced by the Roanoke Vascular Access Center, 4/10. This material was prepared by the Mid-Atlantic Renal Coalition as part of the Fistula First Breakthrough Initiative Special Project; further updates prepared by the End Stage Renal Disease Network Coordinating Center, 4/11; under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. The contents presented do not necessarily reflect CMS policy. CMS Contract Number: HHSM-500-2010-NW002C.