

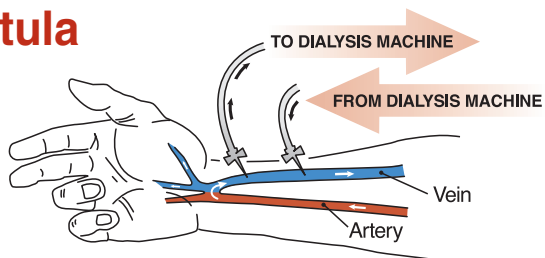
Hemodialysis Vascular Access

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.



arteriovenous
FISTULA FIRST
AVF — The first choice for hemodialysis

Fistula



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.

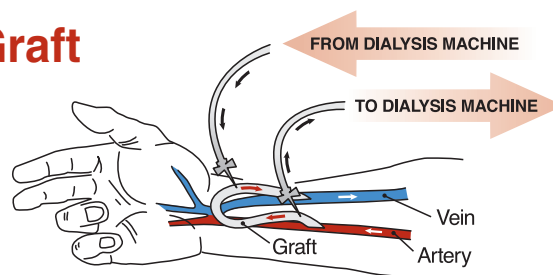
Advantages

- ✓ 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

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

Graft



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

- ✗ Increased hospitalizations
- ✗ Increased risk for clotting
- ✗ Increased risk for serious infections
- ✗ Increased risk for other complications and repair procedures
- ✗ 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

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

