

Hemodialysis Vascular Access

Hemodialysis cleans your blood through a fistula, graft or catheter. One of these will be your hemodialysis **LIFELINE!**

Talk with your doctor to decide which type of vascular access is best for you.

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 best way to get access to the bloodstream 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.

Advantage

- 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 veins

