



# **Your Dialysis Access**

To be placed on the dialysis machine, you must have a "blood access". A blood access provides a way from blood to flow to your body into the dialysis machine, and back into your body.

There are 3 types of accesses that a dialysis patient may have. The decision of which type is made by you and your kidney doctor, based on your personal medical history.

The preferred access is the **A-V fistula**, which is made by a surgeon using your own blood vessels.

The next choice is an **A-V graft**. This is when a small tube is placed in your arm or leg. The least favored access is a **catheter**. A catheter should only be used as a temporary access until your fistula or graft is ready to use.

### What is a fistula?

An A-V fistula is the joining of an artery and a vein together. This will enlarge the veins in your access arm and allows us to connect your blood to the dialysis machine. This requires a minor surgery that is done in the outpatient operating room by a specially trained surgeon or interventional nephrologist. Following surgery most people go home the same day.

# **PROS**

- The preferred access
- Lower chance of infection
- Lower chance of clotting
- Fistulas last the longest time of all types of access
- Only your natural blood vessels are used

# **CONS**

- Once a fistula has been created, it can take up to 6 months before it can be used for dialysis. Special exercises of your arm can shorten this time
- Bruises from needle sticks may cause some minor discomfort

# What is a graft?

An A-V Graft is a plastic tube placed in your arm under your skin, which is attached to an artery and a vein. This allows for a way to carry blood to the dialysis machine. This is a surgery that is done by a specially trained surgeon or an interventional nephrologist in the outpatient operating room. Following surgery, most people go home the same day.

Immediately after the surgery, there may be some swelling, but it goes down after a few days. You may be able to see the outline of the graft in your arm. There will be a scar from surgery, and "needle sticks" will leave small marks until they heal.

#### **PROS**

- Allows a large volume of blood to flow to the dialysis machine
- Once a graft has been placed it can be used for dialysis in a short period of time.

#### CONS

- Artificial item in your body
- Increased chance of clotting
- Increased chance of infection
- Bruises from needle sticks may cause some minor discomfort
- Clots can build up inside the graft
- A graft lasts for a shorter period of time than a fistula

# What is a Dialysis Catheter

A catheter is a plastic tube placed with one end in a large vein near the heart. The other end of the catheter exits through the skin near the collar bone or on the neck. Catheters do not provide a large blood flow to the dialysis machine, and they can be easily infected. This is why **catheters are temporary** until your permanent access is ready to be used.

A catheter can be placed by your kidney doctor or by your surgeon, and does not require a hospital stay.

#### **PROS**

• A catheter can be used immediately after it is placed

# CONS

- Longer treatment times due to low blood flow
- Low amounts of blood provided for dialysis
- Highest chance of infection of all types of access
- Increased chance of blood loss
- Catheters can only stay inside the body for a certain time period, and then they need to be replaced