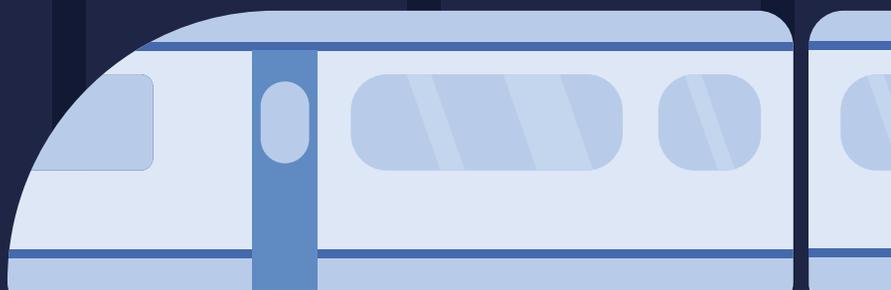


Getting Ready: Your Vascular Access Journey

This brochure is about dialysis vascular access –
your lifeline for hemodialysis treatments.

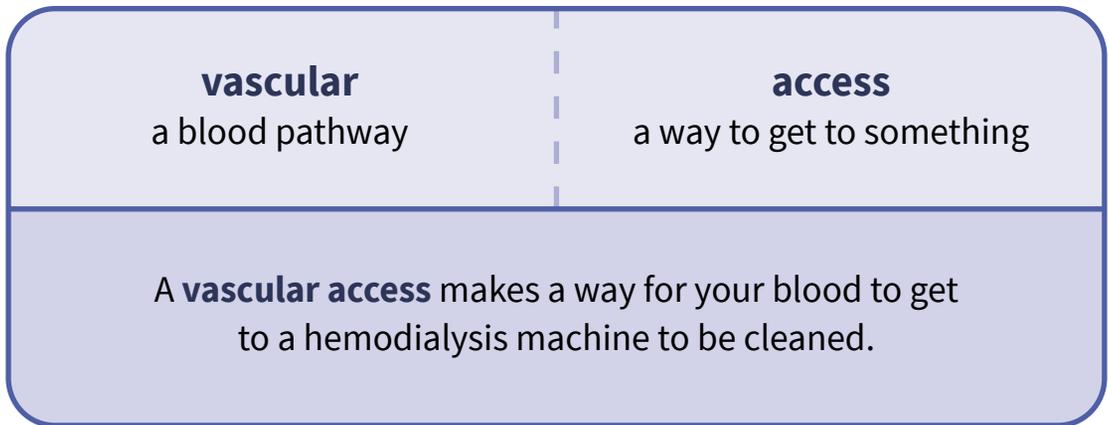


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Dialysis Vascular Access: What? When? Why?

What is a dialysis vascular access?



- It can also be called a **dialysis access** or **access**.
- It is usually located in your arm or chest, but sometimes in your leg.

When do I need a vascular access?

- You need an access before you can start dialysis treatment.
- Talk to your kidney doctor about the right time to get yours.
- Getting your vascular access is like going on a journey. There are many stops along the way.

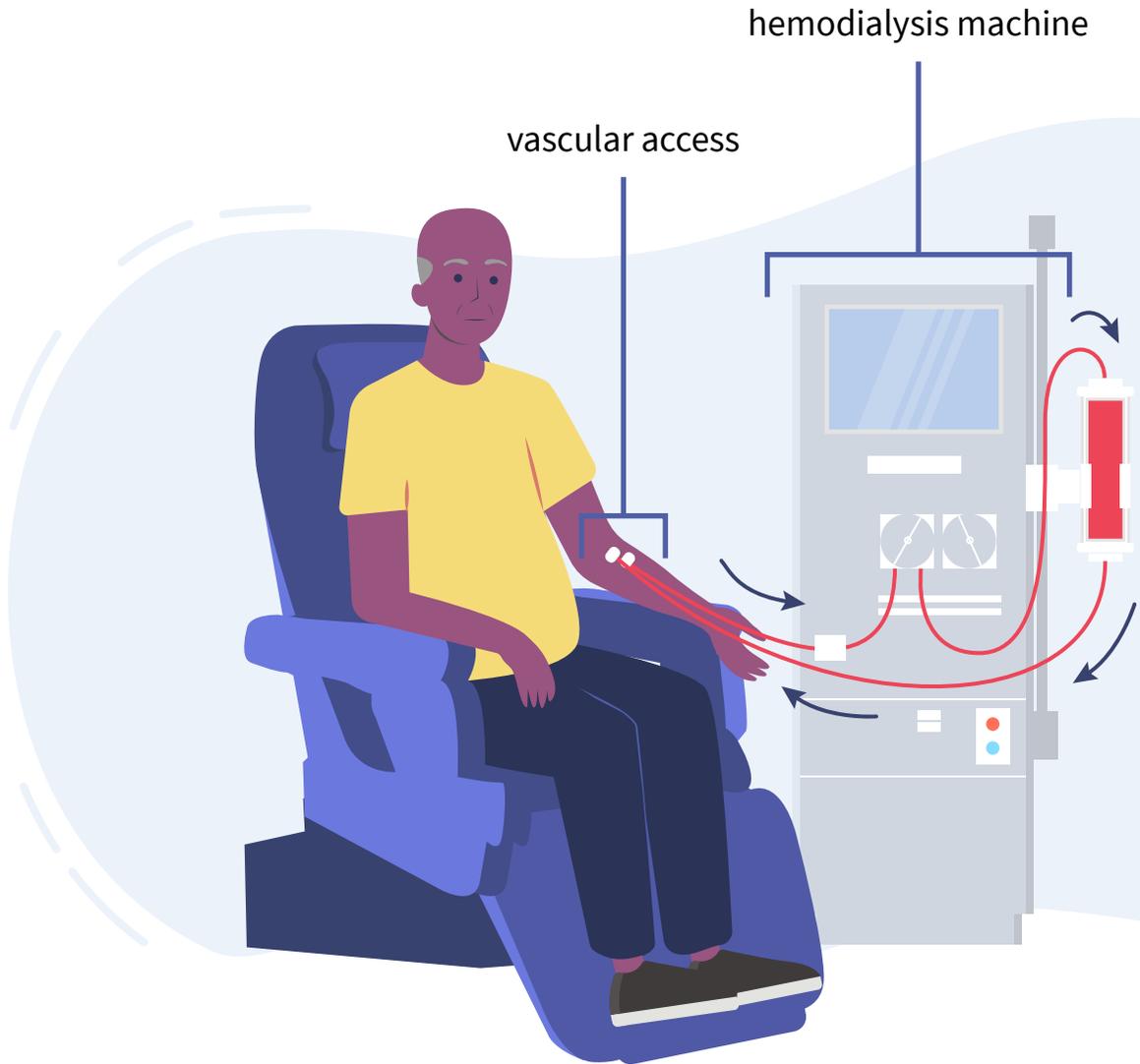


Everybody's vascular access journey is different, so starting early is *always* a great idea.

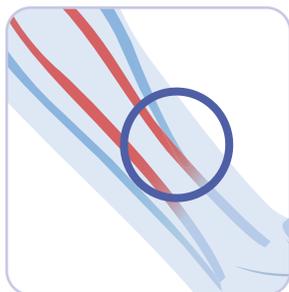


Why do I need a vascular access?

- You need a vascular access so your blood can move from your body to the hemodialysis machine for treatment.
- The machine cleans your blood a little at a time and removes extra fluid. Then, the machine sends the cleaned blood back to your body.

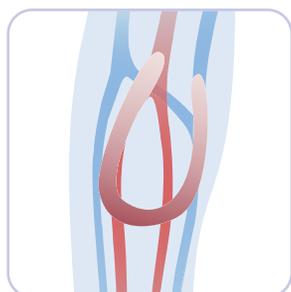


The 3 Types of Vascular Access



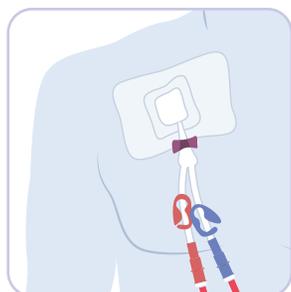
Fistula

The direct connection of a vein to an artery. A surgeon sews your vein and artery together under your skin. A **fistula** is usually in your arm.



Graft

The connection of a vein to an artery with a small, soft tube. A surgeon puts the tube completely under your skin. A **graft** usually goes in your arm but can be put in your upper leg.



Catheter

A soft, plastic tube that goes into a large vein in your chest. One end of the tube comes out through your skin, below your collarbone. A **catheter** can also go in your upper leg.



Talk with your kidney team to understand which type of access may work best for your body and lifestyle.

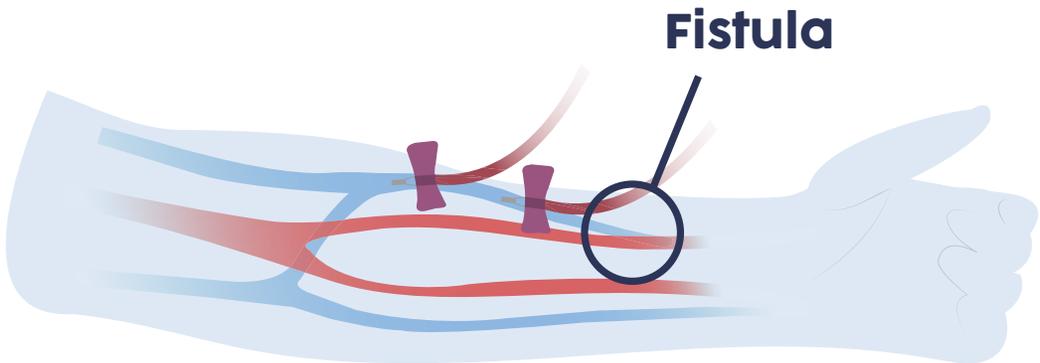
Fistula: Pros and Cons

Pros

- Usually lasts the longest.
- Least likely to get infected compared to grafts and catheters.
- Can usually be fixed if it stops working.
- Allows you to easily bathe, shower, and swim.

Cons

- Can take several months to become strong enough to use for hemodialysis.
- About 1 in 3 need extra procedures to be ready for hemodialysis.
- May need extra procedures if it stops working.
- Uses needles to connect to the hemodialysis machine tubes.
- May look lumpy or bumpy.



Graft: Pros and Cons

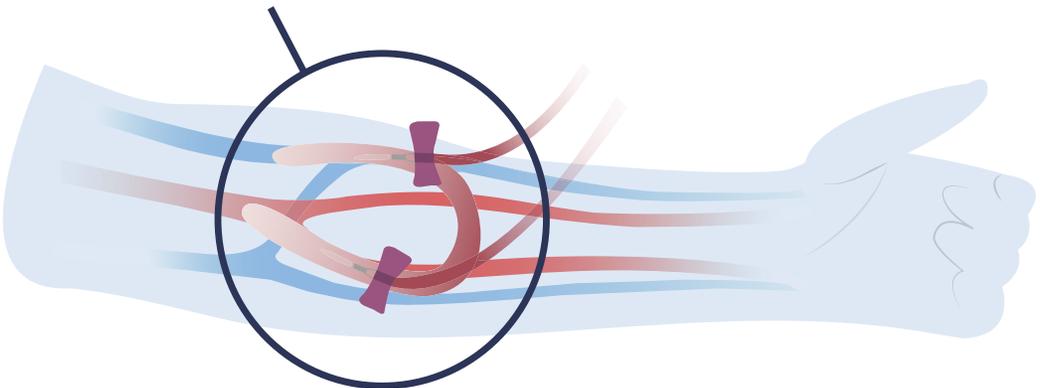
Pros

- Can be used for hemodialysis quicker than a fistula.
- Less likely to get infected than a catheter.
- Can usually be fixed if it stops working.
- Allows you to easily bathe, shower, and swim.

Cons

- May not last as long as a fistula.
- More likely to get stopped up with blood than a fistula.
- May need extra procedures if it stops working.
- Uses needles to connect to the hemodialysis machine tubes.
- May look lumpy or bumpy.

Graft



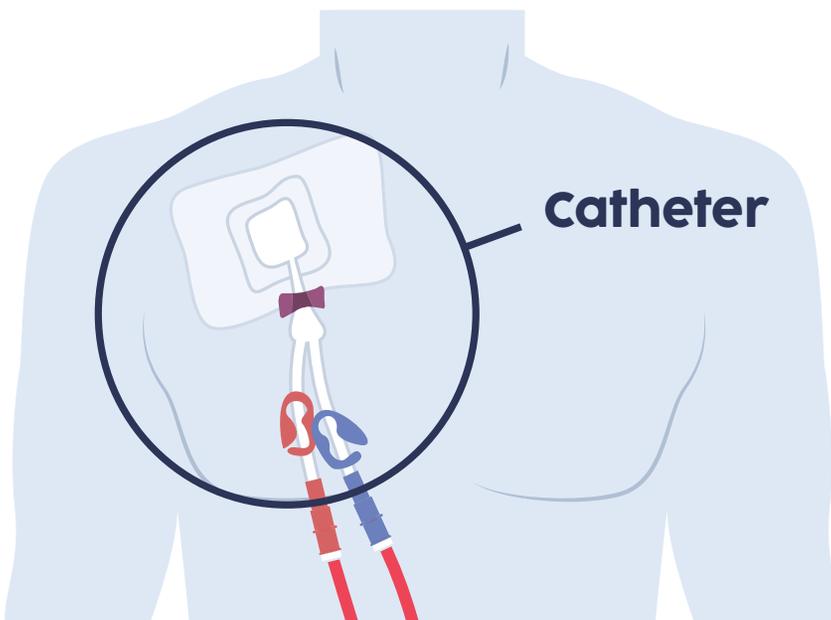
Catheter: Pros and Cons

Pros

- Doesn't require surgery.
- Can be used for hemodialysis right away.
- Doesn't use needles to connect to the hemodialysis machine tubes.
- Helpful to use for a short time if a fistula or graft needs time to heal or stops working.

Cons

- Can get infected easily. Some infections can get in your blood and lead to hospitalization or death.
- May need a new one if it stops working.
- Can't get wet, so it's harder to bathe and shower, and you can't swim.
- Sticks out of your body and can get caught on your clothes.



Things to Know

- There is no right or wrong access type. Each has pros and cons.
- You may need a different type of access at different points in your journey.
- You could also need extra procedures to help your access.



“It’s actually pretty common to need extra procedures! Think of them as detours on your access journey. It’s impossible to predict what will happen, so try to be patient.”

hemodialysis patient

“Procedures are a normal part of keeping your access healthy - like an oil change for a car.”

kidney doctor





You may need a catheter during your journey if...

...your fistula or graft isn't ready when you need to start dialysis.

...your fistula or graft stops working after you start dialysis.

...your blood vessels aren't strong enough for a fistula or a graft.

In some cases, you may need to use a catheter for a short time. In other cases, you may need a catheter for a longer time...or even the whole time you're on dialysis.



It depends on what your blood vessels and body need at the time!

The Dialysis Access Journey: Fistulas and Grafts

1

Learn about kidney failure treatment options

- See if hemodialysis is right for you.

2

Learn about dialysis access

- Learn about the 3 access types: fistula, graft, and catheter.
- Find out what to expect on your access journey.

3

Take pictures of your veins and arteries (vein mapping)

- See what types of access could work with your blood vessels.

4

Meet with your surgeon

- Talk about which types of access may be best for your body and lifestyle.
- Schedule your surgery and get instructions about how to prepare.

5

Have surgery

- Ask someone to drive you to and from your surgery.
- Have surgery to get your fistula or graft.



6

Give your access time to heal and mature

- Give your access up to 6 months to be ready for dialysis.
- Pay attention to your access as it heals.
- Contact your doctor if you notice a change in how it looks, feels, or sounds.

7

Make sure your access is ready for dialysis

- Go to check-up appointments.
- If needed, have extra procedures to help your access work better.

8

Start hemodialysis

- Start dialysis when you and your kidney doctor decide the time is right.
- If you need to start before your fistula or graft is ready, you may need to use a catheter for a short time.

“The journey can be long, but your access will be your lifeline. Try to take it one stop at a time!”

hemodialysis patient



Appointment Log

1

Learn about treatment options

Appointment: _____

Date & Time: _____

Provider: _____

Place: _____

2

Learn about dialysis access

Appointment: _____

Date & Time: _____

Provider: _____

Place: _____

3

Vein mapping

Appointment: _____

Date & Time: _____

Provider: _____

Place: _____

4

Meet with your surgeon

Appointment: _____

Date & Time: _____

Provider: _____

Place: _____



5

Have surgery

Appointment: _____

Date & Time: _____

Provider: _____

Place: _____

6

Give your access time to heal

Appointment: _____

Date & Time: _____

Provider: _____

Place: _____

7

Make sure your access is ready

Appointment: _____

Date & Time: _____

Provider: _____

Place: _____

8

Start hemodialysis

Appointment: _____

Date & Time: _____

Provider: _____

Place: _____

Caring for your Fistula or Graft

Caring for your access every day helps keep it healthy. Here's what you can do:

1 Wash it!

- Wash your access every day so it doesn't get infected.



2 Check it!

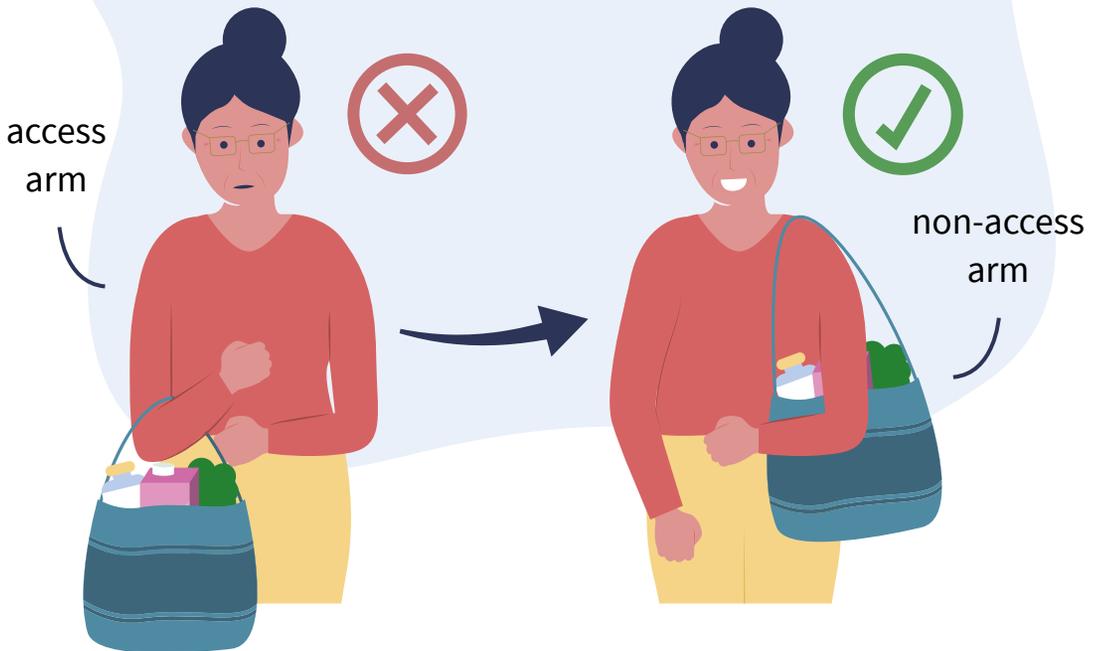
- Look for signs of infection like swelling, redness, or warmth.
- Feel every day for a thrill. A **thrill** is the buzzing feeling when you touch your fistula or graft.
- Listen for a bruit. A **bruit** is the whooshing sound you can hear with a stethoscope.



3

Protect it!

- Use your non-access arm to take blood pressure, have blood drawn, or put an IV in.
- Don't put pressure on your access. Try to not sleep on it or wear clothes that are tight around it.
- Be careful when carrying heavy items. Don't put them on top of your access.

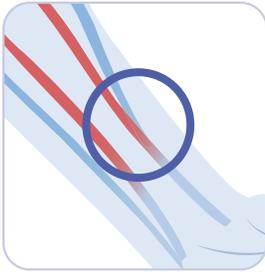


You know your body best. If you notice a change in how your access looks, feels, or sounds, let your doctor know.

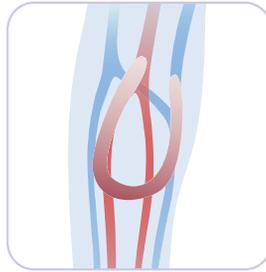
5 Key Takeaways

1 You need a vascular access before you can start hemodialysis treatment.

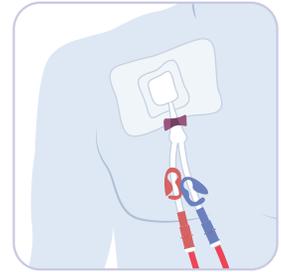
2 There are 3 access types: fistula, graft, and catheter. Each has pros and cons.



Fistula



Graft

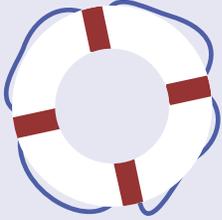


Catheter

3 Getting your access is like going on a journey. It takes time and everybody's experience is a little different.

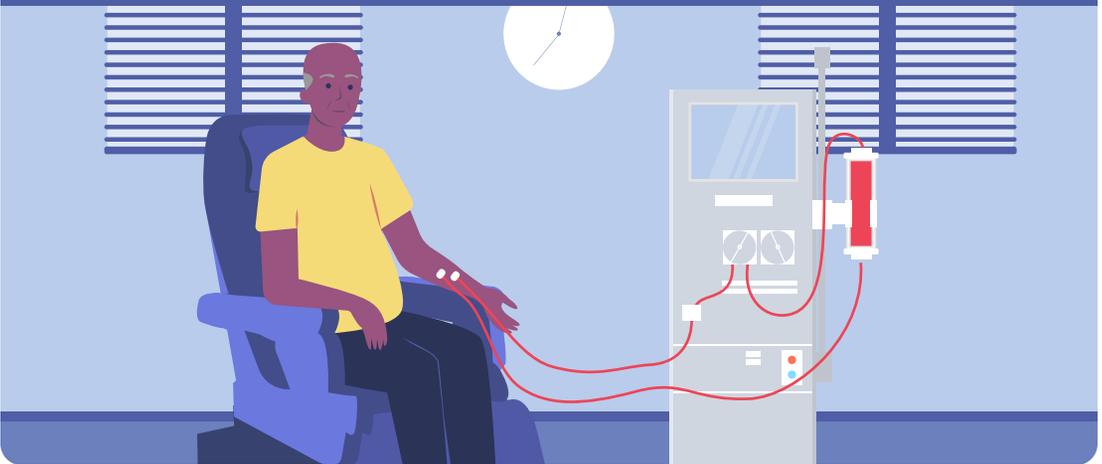
4 It's normal to need extra procedures to keep your access working. Think of these as detours on your journey.

5 Pay attention to your access. If something changes or feels funny, let your doctor know.



Whether you choose dialysis in a clinic or at home, your vascular access will be your lifeline.

In clinic



At home



Talking with your Team

Talk with your kidney care team during your dialysis access journey!

- Share what matters to you and what you like to do.
- Talk about your fears and concerns.
- Ask all your questions.



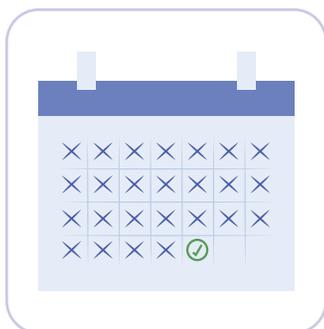
How will my access affect how I live my life?

What will my access look like?

When can I do my regular activities again?

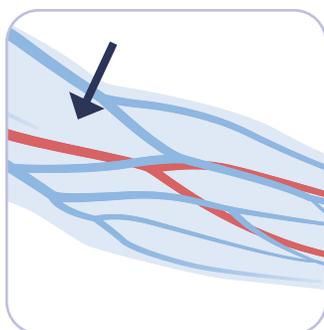
How much will it hurt?

Helpful Words to Know



Access Maturing

Fistulas and grafts need time to become ready for hemodialysis. “Maturing” means that your access is getting strong enough to use for dialysis.



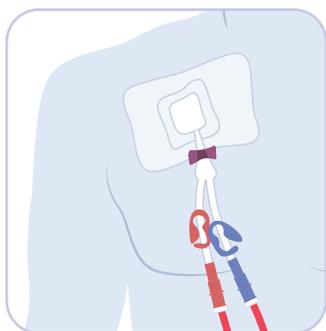
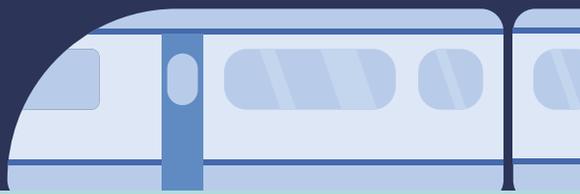
Artery

A type of blood vessel, or blood pathway, in the body. An artery (**red** in this picture) carries blood from your heart to other parts of your body.



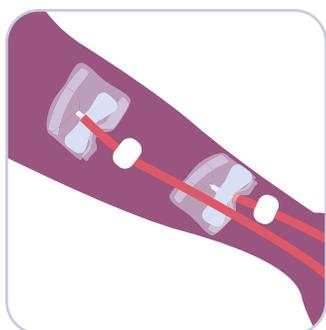
Bruit

The “whooshing” sound that can be heard when listening to your fistula or graft with a stethoscope. Hearing a bruit is good! It means that blood is flowing through your access like it should.



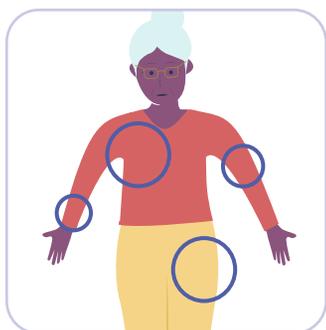
Catheter

A type of vascular access where a soft, plastic tube goes into a large vein in your chest. One end of the tube comes out through your skin, below your collarbone. It can also go in your upper leg.



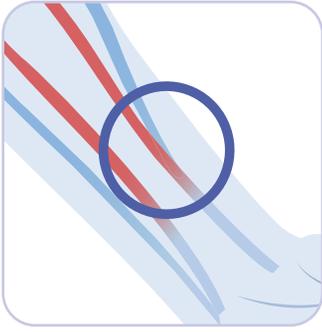
Cannulation

The act of putting needles into your fistula or graft. Two needles are used to connect your access to the dialysis machine tubes. This happens at every hemodialysis treatment when you have a fistula or graft.



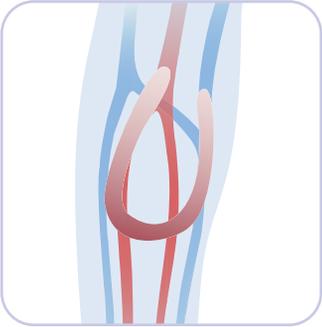
Dialysis Vascular Access

A dialysis vascular access makes a way for your blood to get to a hemodialysis machine to be cleaned. It can be called a dialysis access or access, for short. Your access is your lifeline for hemodialysis treatment.



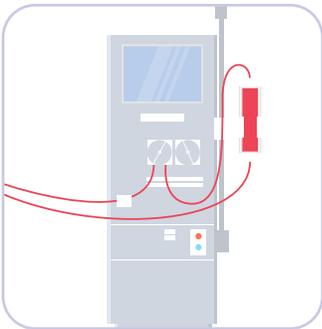
Fistula

A type of vascular access where your vein is connected directly to an artery. A surgeon sews your vein and artery together under your skin. It's usually in your arm.



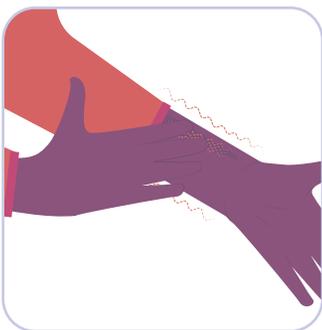
Graft

A type of vascular access where your vein is connected to an artery with a small, soft tube. A surgeon puts the tube completely under your skin. It usually goes in your arm, but can also go in your upper leg.



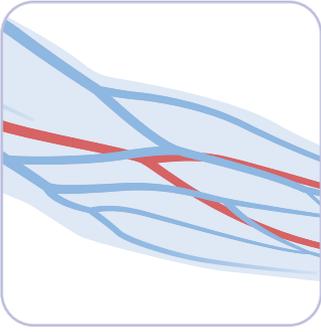
Hemodialysis

A treatment for when your kidneys stop working. During treatment, a machine cleans your blood a little at a time and removes extra fluid. Then, the machine sends the cleaned blood back to your body.



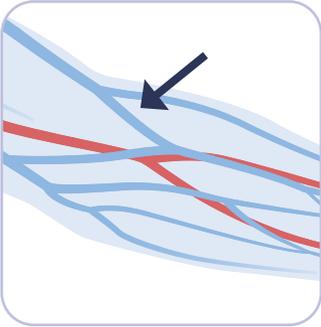
Thrill

The “buzzing” feeling when you touch a fistula or graft with your fingers. Feeling a thrill is good! It means that blood is flowing through your access like it should.



Vascular

A word used to describe blood vessels (**arteries** and **veins**). Blood vessels are the pathways that carry blood around your body.



Vein

A type of blood vessel, or blood pathway, in the body. A vein (**blue** in this picture) brings blood to your heart from other parts of your body.



Vein Mapping (also called Vessel Mapping)

Taking pictures of the blood vessels (**arteries** and **veins**) in your arms. The pictures help doctors figure out the best access for you and where it should go in your body. The pictures are taken with an ultrasound machine. No dye or needles are used, and it is not a surgery.

Remember! You are not alone on this journey.

It's okay to feel afraid or unsure along the way. Ask all your questions and get all the information you need. A lot of people want to help you. They're just a phone call away.

You've got this!



Scan this QR code or visit go.unc.edu/dialysisaccess to see the animated video about dialysis vascular access.

The logo for UNC Health Care Kidney Center. It features a stylized building icon to the left of the text "UNC HEALTH CARE" in a large, bold, serif font. Below this, "KIDNEY CENTER" is written in a smaller, all-caps, sans-serif font, separated by a thin horizontal line.

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