WHAT IS AN AV GRAFT?

A vascular access is needed to continuously take blood to the dialysis machine to be cleaned and returned to the body. An arteriovenous or AV fistula is the preferred choice for vascular access when feasible. There are some patients for which creating an AV fistula may not be possible.

An arteriovenous or AV graft is made when the veins are not suitable for an AV fistula. The AV graft is a form of vascular access which is created by inserting a synthetic tube to connect a vein to an artery. Two dialysis needles are inserted into the AV graft on each hemodialysis treatment. Your vascular access team will assess the size and suitability of your veins and arteries to make a well-functioning AV graft.

AV grafts

- are made of synthetic material; one end is attached to a vein, the other to an artery
- sit under your skin either in your lower or upper arm
- can be created in either right or left arm, or in the leg
- can be ready for use in days to weeks depending on the type of AV graft you have
- are an option for patients who do not have veins for AV fistulas
- are associated with a lower risk of infection compared to catheters, but with a higher risk of infection compared to AV fistulas
- have a risk of clotting
- may require procedure(s) to keep them working
What can I expect after my AV graft is made?

- You should be able to feel a vibration or “thrill” over the surgical site.
- You may experience some temporary pain and swelling at the surgical site. Take your pain medication as prescribed by your surgeon.

**VERY IMPORTANT** Inform your dialysis nurse of any numbness, tingling, weakness, discoloration, coolness or pain in your hand (on the same side as your AV graft). The colour and temperature of your fingers should be the same in both hands.

**FIGURE 1: AV Graft**
What do I need to do before hemodialysis treatments?
- Wash your AV graft arm with soap and water.
- Wash your hands when you arrive in the dialysis unit.
- Talk to your dialysis nurse about learning to needle yourself.
- Encourage your dialysis nurse to rotate your needle sites at every dialysis treatment.

What do I need to do after hemodialysis treatments?
- Wear gloves when holding your needle sites.
- Do not scratch or remove scabs.
- If your AV graft starts to bleed after dialysis, apply gentle pressure using a clean towel/gauze. If the bleeding continues, keep applying pressure and go to the nearest Emergency Department.
- Contact your dialysis team if you do not feel a thrill over your AV graft or if your AV graft is red, oozing fluid, painful, or you develop a fever.

How do I care for my AV graft?
- Keep all dressings dry after your AV graft has been made.
- Check for the vibration or thrill over your AV graft at least once a day.
- Avoid wearing anything tight over your AV graft.
- Avoid resting anything heavy on your AV graft.
- Do not allow blood to be drawn, blood pressure to be taken or for intravenous lines be placed in the arm that your AV graft was made.
- There is no restriction to most usual activity once the surgical site has healed.
- Elevate your arm if you develop any swelling in the same arm as your AV graft and notify your vascular access team.
AV GRAFT FACT SHEET

Your Guide to Vascular Access

Carry your Save My Veins wallet-card to inform your healthcare provider to protect your arm veins.

Important contact numbers:

Kidney Doctor ____________________
Surgeon _________________________
Dialysis Unit _____________________
Vascular Access Team ______________

Need this information in an accessible format?
1-855-460-2647, TTY (416) 217-1815 publicaffairs@cancercare.on.ca.

About the Chronic Kidney Disease Vascular Access Fact Sheets:
This Fact Sheet was created by the Ontario Renal Network (“ORN”), a work unit within Cancer Care Ontario (“CCO”), in collaboration with the Provincial Vascular Access Working Group (“PVAWG”) to provide patients with standardized educational material about Catheters. This Fact Sheet is to be used for informational purposes only. This Fact Sheet is not a substitute for medical advice. This Fact Sheet may not include all relevant information and is not an exhaustive resource. Always consult with your healthcare provider if you have questions or concerns. The information in this Fact Sheet does not create a physician-patient relationship between CCO/ORN/PVAWG and you.