

Common concerns

News and information
for kidney patients and their families



Special Edition

Important Announcement

The Centers for Medicare and Medicaid Services (CMS) and Renal Network 11 are pleased to announce an important new initiative called “Fistula First,” aimed at significantly increasing the use of AV fistulas (AVF) for hemodialysis access.

The Fistula First project aims to fulfill the goals recommended by the National Kidney Foundation’s Dialysis Outcomes Quality Initiative: AVF rates of 50% (or greater) of all patients who start dialysis, and at least 40% of patients who are currently on dialysis. This constitutes a significant increase over current national averages, which are 29% for new dialysis patients and 31% of all patients currently on dialysis. These goals are achievable. All across the United States, there are examples of providers who have harnessed the knowledge of the many disciplines whose care influences vascular choices for patients to meet or exceed the goals of this initiative.

Vascular Access...Your Lifeline to Treatment

For hemodialysis (HD) patients, a well functioning dialysis access is necessary to provide the best dialysis treatment possible. Learning about the different types of dialysis accesses is important so you can be involved in the decision of which one is best for you.

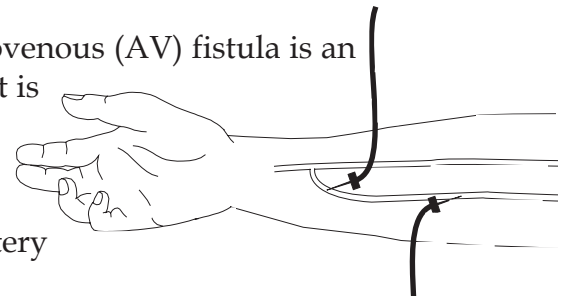
If you have questions as you read this article, please bring them to the attention of your dialysis team. By doing this, you can gain a better understanding of this important topic and how it affects your health as a dialysis patient.

What are my choices for an access?

If you have chosen HD for your therapy, there are three main types of vascular access. These are a fistula, a graft, and a catheter.

Fistula

An arteriovenous (AV) fistula is an access that is made by connecting a vein and an artery



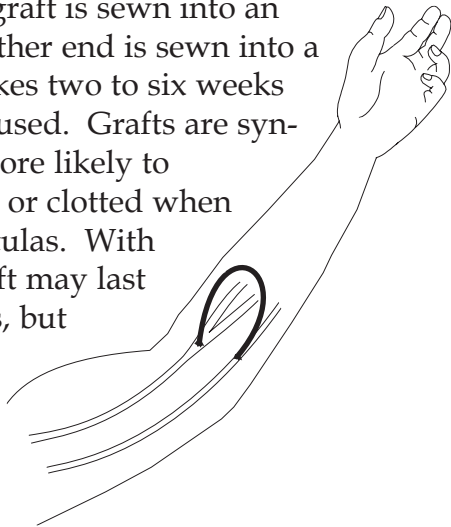
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together. After this connection is made, the stronger flow of blood from the artery takes a “detour” through the vein, which then makes the vein larger. It typically takes time (3-4 months) and exercise for a fistula to become developed enough to use for dialysis treatments. Since a fistula uses your own vein and artery, it is less likely to clot or become infected. AV fistulas last much longer than other access types. For most people, an AV fistula is the best type of access.

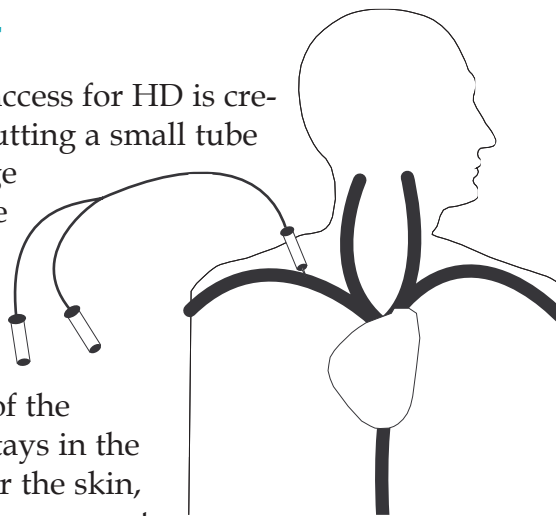
Graft

A graft is an access that is created by inserting a small flexible tube under the skin in your arm. One end of the graft is sewn into an artery and the other end is sewn into a vein. A graft takes two to six weeks before it can be used. Grafts are synthetic and are more likely to become infected or clotted when compared to fistulas. With good care, a graft may last for several years, but usually a graft does not last as long as a fistula.



Catheter

Catheter access for HD is created by putting a small tube into a large vein in the neck, chest, or groin. The bottom part of the catheter stays in the vein under the skin, while the upper part



extends outside the skin. The catheter has two channels that allow blood to leave the body through one channel and then return through the second channel. This access can be used immediately, and it is often used when dialysis must be started before a permanent access has been created or while the permanent access is developing. Catheters have an increased number of problems with clotting and infection. In addition, the amount of blood flow is usually limited, so the dialysis treatments may not be as effective as with a permanent access. Although there may be exceptions, a catheter is not the best long-term access choice for hemodialysis.

Access Care

Both an AV fistula and a graft require dialysis needles to be inserted into them to gain access to your blood for hemodialysis, and so it is important to protect your access arm from injury that might lead to clotting or infection. Your dialysis team will teach you how to care for your access at home. Your dialysis team will also periodically test your access to make sure it is working as it should. Most of these methods of testing can be performed right in the dialysis unit, although occasionally you might be asked to go to a vascular access clinic for further testing.

If you have a catheter, it is very important that you protect the site where the catheter exits the skin. Your dialysis team will clean and dress the area following each treatment and it is very important for you to leave the dressing in place and to keep it clean in between treatments. Again, follow the advice and direction of your dialysis team.

Vascular Access: The Patient's Perspective

This issue of Common Concerns has focused on your "Access" to dialysis. Whether you are a new dialysis patient or have been on dialysis for many years, you have most certainly been presented with educational materials about vascular access. Even with the material presented in this newsletter or by your health care team, you might continue to question the benefits of having a permanent access, such as a fistula or an AV graft placed. Network 11 has two consumers, David Axtmann and Bruce Lublin, who have been on hemodialysis for a combined total of more than 65 years. In the following article David and Bruce discuss issues related to vascular access. David and Bruce's understanding, perspective, and experience with vascular access may be valuable to you as you consider the placement of a permanent access, or even in the maintenance of your current permanent access.

What type of access do you have and how long have you had it?

Bruce: I have an AV fistula that was placed in my left arm in 1972. This fistula has not required any revision, has not had any infections, and has never clotted.

David: I had an AV fistula placed in 1971. For the first 28 years the fistula required one minor modification in about 1976. Approximately three years ago I did have to undergo a revision.

How did you choose your access?

Bruce: The options were limited back then, but my doctor at the time stated that with good care this access could last a long time.

David: My physician said a fistula was the best option for me.

What have you done to maintain your access for so long?

Bruce: I place my own needles. I am very aware of rotating the insertion sites, and I am very careful to keep my access clean. I also took some classes to learn more about needle placement and the importance of maintaining my access.

David: I do home hemo, so I have been fortunate to have my wife as my primary needle sticker. I was never taught to stick my own needles, but if I didn't have my wife to stick the needles I would learn to do it myself. Also, we are very careful to keep my access clean and to monitor it closely for any changes.

How have you benefited from having a permanent access?

Bruce: I am able to consistently reach blood flow rates of 400 or more. My Kt/V is regularly in the 1.7-1.8 range and, in general, I firmly believe that over the last 32 years my quality of life has been better because of having a permanent access. Also, by doing my own needle sticks I have more control, and responsibility for my health care.

David: I believe that by having a permanent access I have been able to have smoother and more effective dialysis runs. I have not had to

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deal with many problems in terms of access infections, clotting, or revisions.

What do you think prevents all patients from having a permanent access placed?

Bruce: Some patients are not physically able to have an access placed and have to utilize more temporary solutions. However, I believe that many patients are concerned about the pain involved in having needle sticks, or they aren't able to see the long-term effects of not receiving adequate dialysis via temporary access. I have found that by placing my own needles I am more able to cope with the pain associated with a needle stick. And by educating myself I am fully aware of the benefits of having a permanent access.

David: I wonder if patients are getting enough education about the importance of having a permanent access placed. Or maybe even with the education they have received they don't completely understand the benefits of a permanent access. I also believe that the fear of needles is a reason.

What would you tell other patients about having a permanent access placed?

Bruce: It is important to take control of your health care and to do the most you can for yourself. There is no question in my mind that having a fistula is one of the single greatest choices a person can make to improve their dialysis treatments. "If a person is physically capable of having an AV fistula, I believe it is the best for a patient over a long period of time and they will have an increased quality of life."

David: Having a fistula has helped me feel better, and I think it would help most patients feel better. It is important as a patient to educate yourself about the best ways to improve your health. I think if most patients understood the benefits of having a permanent access they would ask their doctor if they are a candidate.

One difficult reality of ESRD is that not all patients are candidates for a permanent vascular access. However, if receiving a permanent access is an option for you and you have been reluctant to pursue this, take time to consider the information presented in this article. These two patients, who have coped with some of the same health setbacks you might be experiencing, are firm believers and strong proponents of the benefits of having a permanent access placed. Both have stressed the importance of understanding the benefits of having a permanent vascular access and the importance of learning to take care of that access. With the placement of a permanent access and close attention to the care of this access, you too may be able to improve your overall physical and emotional well-being.

Editor's Note -

This article first appeared in Common Concerns in the early summer of 2002. Since that time, both Bruce and David have lost their courageous battles with kidney disease. The re-printing of this interview is a testament to the time, energy, and constant effort both men put forth to improve the lives of their fellow kidney patients. Both men are fondly remembered and dearly missed by the staff of Network 11 and the Network 11 Consumer Committee.

Access Do's!	Access Don'ts!
<ul style="list-style-type: none"> • Do ask your doctor if you are a candidate for a fistula. If you are told no, ask why. • Do check your access everyday. Look for signs of infection (usually redness and /or swelling), and you should touch the access to feel a buzz from the blood flow. • Do wash your access before every treatment. • Do make sure the dialysis unit staff monitors your access and rotates needle insertion sites. • Do make sure the dialysis unit staff uses universal infection control practices (wash hands, clean gloves) before touching your access site. • Do immediately inform your MD, RN or Technician if you notice any changes in your access. 	<ul style="list-style-type: none"> • Don't wear tight clothes or jewelry around your fistula or graft. Even wearing a watch on your access wrist can limit blood circulation and negatively affect your access. • Don't lift heavy objects or put pressure on your access arm because this will limit circulation. You should not sleep with your access arm under your head or body. • Don't have blood draws, blood pressures, or IV's done on the arm or leg that has a working fistula or graft. Be sure to inform any health care worker of where your access is, so it is not damaged by these common procedures. • Don't be afraid to ask questions or raise concerns about your access site with your health care team.

Ask the Doctor...

Victor Rozas, MD
Great Lakes Renal Network, Alma, MI

1. Why should I have a fistula placed?

A fistula is far superior to any other type of vascular access. They also last the longest, and have a low rate of infections. Other advantages are that fistulas tolerate low blood pressures much better and have a lesser chance to cause “steal” syndrome (shunting of blood away from the hand).

2. I see other patients in my clinic that have catheters in their neck. They don't have to be stuck with needles and they seem to be doing well. What can you tell me about that?

Having a catheter in the neck is like having a “knife hanging at the top of the neck”. The major drawback is the potential for infection,

because a catheter is a direct access to the blood stream, and it is only a matter of time before an infection reaches the blood stream. Those infections are not simple. They can travel to many organs, among them the heart, the brain, and the spine. These infections can be potentially life threatening. The catheter can also become clogged; it can cause narrowing of the vessel where it was placed. It is true that many patients may have had a catheter for a long time without any apparent problems, but unfortunately a substantial number of them will end up with serious complications. A catheter should be used as a last resort or only on a temporary basis.

3. I am concerned about the turnover and competency of staff in my clinic. What can I do to make sure that my access is being cannulated appropriately?

The hemodialysis access should be cared for as a much-prized possession; it is a lifeline. As a patient you have to know everything about its proper care. Your dialysis center should have written instructions for the care of vascular

accesses. You should feel free to discuss with the staff and your Nephrologist about all the concerns you have regarding your access.

4. What if my MD tells me that I am not a candidate for a fistula? Should I get a second opinion?

There are very few instances where a fistula is not indicated. Nowadays, in the majority of patients a “mapping” study of the blood vessels in the arm is conducted, which will help select the best veins for a fistula and decrease the chance for an unsuccessful surgery. If the mapping study was not done, asking for a second opinion is quite reasonable.

5. If I do receive a fistula, what should I be doing to take care of it?

It is important to receive a set of written instructions and to discuss them. Patients should keep follow up appointments with the surgeon who placed the fistula and with the Nephrologist to see if it is developing appropriately; sometimes additional procedures may be needed to help in its maturation.

Additional Vascular Access Information

Understanding Your Hemodialysis Options

American Association of Kidney Patients 800-749-2257 or www.aakp.org

Vascular Access Fact Sheet

National Kidney Foundation 800-622-9010 or www.kidney.org

Kidney School-Module 8: Vascular Access—A Lifeline for Dialysis

Life Options 800-468-7777 or www.lifeoptions.org

Vascular Access for Hemodialysis

National Kidney and Urologic Diseases Information Clearinghouse
800-891-5390 or www.niddk.nih.gov