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Hemodialysis Access

There are a few varieties of **Hemodialysis** access - **Fistula**, **Graft** or **Catheter**.

The **Fistula** is the most desirable access. It uses your own blood vessels- no plastic or manmade materials. The blood vessels have been re-routed a bit to allow an artery and a vein to be sewn together to form the fistula. After time, the constant pressure from the artery will cause the vein to enlarge. This is good because it allows a brisk flow of blood to flow through the vein. It does take time for the fistula to mature or enlarge. It can sometimes take four months or longer for maturation. You can tell that your fistula is working by feeling for the vibration when you touch it. If you do not feel the vibration, you should call your surgeon immediately.

Occasionally, the vein or artery may not be large enough to mature into a fistula. If this occurs then a graft could be inserted.

A **Graft** is similar to a fistula except that it is made of plastic. It is inserted between an artery and a vein and acts as the connection. A graft requires a much shorter time to heal and can be used in about a month.

Special care should be taken not to put too much pressure on the fistula or the graft. That includes wearing tight fitted clothing, wristwatches or a purse strap over the area. Also avoid lying on the access arm. Excess pressure can cause clotting in the fistula, which prevents it from working.

The third access is a **Catheter**. It seems to be the easiest of the three types of accesses, however the catheter causes the most problems.

Because the catheter is inserted through the skin directly into the blood stream, it allows bacteria from the skin to travel through the blood. This causes bloodstream infections which can be life threatening.

Another major problem with catheters is scarring in the vein caused by irritation from the catheter on the lining of the vein. The scarring can be severe and involve all the veins in the neck area. It is important to keep the catheters sterile dressing on at all times.