What is the track?

The track is a tunnel that is created by the formation of scar tissue – exactly like the hole created in an earlobe for a pierced earring. This track goes from the surface of your skin to the outside wall of your fistula (blood vessel wall). Once the track is well healed, there are no nerves or tissue in the path of the needle to cause you pain.

Why would I want the buttonhole technique used on my fistula?

Research has shown that there are:

✓ Fewer infiltrations (swelling from the needle going through the fistula wall).

✓ Fewer missed attempts to place needles.

✓ Less pain when inserting needles.

There are dialysis patients who have been using this technique for over 20 years with the same AV fistula!

Can I use the buttonhole technique on my access?

This technique is only for use with AV fistulas, not AV grafts. Check with your nephrologist or dialysis nurse to see if this technique would work for your access.

Northwest Renal Network

4702 42\textsuperscript{nd} Avenue, SW
Seattle, WA 98116
(206) 923-0714
Patient toll-free line (800) 262-1514

This document was prepared by Northwest Renal Network, under contract with the Centers for Medicare & Medicaid Services (contract #500-03-NW16). The contents presented do not necessarily reflect CMS policy.

Serving Alaska, Idaho, Montana, Oregon and Washington
What is the buttonhole technique?

Buttonhole technique is another way of cannulating (putting needles in) your fistula. It requires putting the needles in the exact same spot at the same angle and depth every time your needles are inserted.

But, my doctor told me not to let the staff put the needle in the same place because that could cause an aneurysm.

The two pictures below explain what your doctor meant.

In the top picture, the needle is placed in the same small area over and over (“one-site-itis”). This causes the wall of your fistula to weaken and balloon out, forming an aneurysm. In the bottom picture, the needle goes in the exact same hole every time – this does not cause an aneurysm.

Is the buttonhole technique a new procedure?

No - the buttonhole technique has been used on AV fistulas in Europe for more than 25 years. It was first used on a patient who had very limited surface area for cannulation. It was so successful that other patients wanted to have their fistulas cannulated using the buttonhole technique. Because there is little to no pain associated with buttonhole cannulation, patients are more willing to learn to cannulate their own access using this technique.

Buttonhole technique is becoming very popular in the United States. Up until a few years ago, the blunt needles, preferred for this technique, were not available in the United States.

What do you mean by the term “blunt” needles?

Blunt needles are rounded on the top and do not have a sharp, cutting edge like traditional dialysis needles do.

Since your access is entered through a specially formed track, there is no need for sharp needles.

Blunt needles help to prevent problems like cutting or scraping the newly formed track that can cause oozing around your needles during dialysis.

One big advantage of the blunt needles is that they prevent you from accidently sticking yourself.