Fistula Self-Punctures



1. Get ready—gather supplies

2 fistula needles
2 saline filled syringes
Tape for securing needles

2 Xylocaine–filled syringe
2 packages of 4 x 4s
Gloves and face shield

1 heparin syringe with __cc
2 Betadine pads or
Needle container

2 Chlorascrub swabs

2. Wash hands and access arm with soap and water, rinse well, then dry

3. Select puncture sites—stay 1.5 inches away from surgical site. Fistulas can roll; a well secured vessel is easier to puncture

- Wash hands
- Place blue protector pad under the arm
- Put on gloves, goggles, and mask or face shield

4. Disinfect the puncture sites

- Use a Betadine pad or Chlorascrub swab in a circular pattern over each site starting at the puncture site
- Work from the inside to the outside in a circular motion.
- Allow site to dry—for Betadine allow 3-5 minutes; for Chlorascrub allow 30 seconds

5. Wash hands and access arm with soap and water, rinse well, then dry

- Inject Xylocaine at the selected arterial and venous puncture sites
 - Place the Xylocaine needle just under the skin
 - Pull back on the plunger to check for the absence of blood, then inject a small bubble
 - Repeat for second site



6. Place arterial needle into the flow of the vessel

Note: If using a Graft, start with step B below

- a. Fistulas can roll; to prevent rolling, secure fistula by inflating the blood pressure cuff above the fistula and inflate to 60 70
- b. Check that the cap on the fistula needle is tight after removing it from the package
- c. Hold the needle by the wings with the bevel up over the puncture site
- d. Secure the skin and vessel tight with a 3-point handhold
- e. Insert the dialysis needle at a 30 40 degree angle or as needed to cannulate
- f. Watch for a flashback, reduce the angle, and then thread the needle
 - If flashback stops, stop threading, pull back, and realign before continuing to thread needle
- g. Release air from the BP cuff
- h. Tape needle to arm
 - Use 1/2-inch tape over the wings and another piece under the tubing, to create a chevron
 - Use 1-inch tape over the wings to secure needle
- i. Clamp needle, loosen cap, **unclamp**, remove air, re-clamp, and retighten cap when tubing is filled with blood
- j. Take blood sample, if needed
- k. Attach a saline-filled syringe, **unclamp**, pull it back checking for flow, then infuse saline and re-clamp

Note: An infiltrated needle must be removed to prevent damage to the blood vessel

7. Place venous needle with the flow of the vessel

- Repeat steps 6 a-k above
- Replace saline syringe with heparin-filled syringe
- Unclamp needle, pull blood back into the syringe and inject heparin
 - Repeat twice to circulate the heparin

Note: An infiltrated needle must be removed to prevent damage to the blood vessel

8. Attach 4x4 wristband with paper tape; tape dialysis needles to wristband

Proceed to "Going On" procedure provided by your nurse

