



# Self-Needling Your Fistula Using the Buttonhole Method

## Important Points

- Think about a buttonhole track like an earring hole.
- Choose your buttonhole sites carefully.
  - a. Choose the straightest part of your fistula.
  - b. Put needles at least 2 inches from the fistula incision (anastomosis).
  - c. Keep needle tips at least 1 inch apart.
- Use the *same* hole, the *same* angle and the *same* direction each time you needle your fistula.
- Always use a tourniquet.
- Use sharp needles to form the track. It usually takes 8 to 18 times to form a track.
- Once the track is formed, use dull needles. Never use sharp needles.
- Report redness, swelling, tenderness or drainage in your fistula arm to your nurse.

## Needling a Buttonhole Track

### Supplies

- Clean drape or towel
- Disinfectant swabs/wipes
- Gauze, 2–4 (2x2 inch) squares
- Tape (1 inch and ½ inch)
- 2 fistula needles
- Clean gloves (2 pairs)
- Sharp tweezers or \_\_\_\_\_
- Tourniquet
- Sharps container

### If taught to prime needles:

- Two (2) 10cc syringes
- Normal saline or heparin

1. Check your access for signs of infection (redness, swelling, tenderness or drainage).
2. Check your access is working by feeling the thrill (pulsation or vibration). Use a stethoscope to listen for a “whooshing” sound.
3. Wash your hands and access arm with warm water and anti-bacterial soap.
4. Gather supplies on your drape or towel. Cut tape.
5. If taught to do so by your kidney nurse, prepare syringes and prime your dialysis needles.
6. Put on clean gloves.
7. Cleanse needle sites with a disinfectant-soaked gauze using a circle motion and moving from the inside to the outside. Allow to air dry.
8. Soak scab with a disinfectant-soaked gauze until scab is soft. Do not “over soak” the scab or it will become “mushy” and hard to remove.
9. Gently lift scab off with a disinfectant-soaked gauze. If the scab does not come off easily, you use clean tweezers or \_\_\_\_\_.
10. Cleanse the needle site again with a disinfectant-soaked gauze.
11. Apply tourniquet 4 inches higher than your venous (top) needle site.
12. Put on clean gloves.

13. Insert arterial needle:
  - a. Remove cap and hold needle by the plastic wings with the opening (bevel) facing up.
  - b. Pull back on the skin with light pressure below where you will be placing the needle.
  - c. Insert needle using a 25 degree angle. Flatten angle once you see blood pulsing (flashback). Slowly advance it to the white end in the direction of the fistula. If you have trouble advancing the needle, **STOP** and call for help.
  - d. Tape down needle wings.
  - e. Check the flow of blood by pulling up and down on the syringe. Syringe should be in a vertical position.
  - f. Clamp needle.
  - g. Tape needle securely leaving exit site covered with tape or a dressing.
14. Repeat step 13 to insert the venous (top) needle.
15. Remove tourniquet.
16. Remove syringe and attach machine tubing to the arterial needle.
17. Repeat step 16 for the venous needle.
18. Open needle clamps and start dialysis.



1. Wash your hands with anti-bacterial soap.
2. Prepare supplies, open gauze, prepare tape and/or band aids.
3. Clamp both needles. Place pad under arm.
4. Hold needle while helper or staff remove tape.
5. Place gauze over the needle site without applying pressure.
6. Remove needles one at a time by holding the needle tubing with your fistula hand and placing gauze over the puncture site with your other hand. Pull needle out slowly while ensuring the gauze is over the puncture site. Hold puncture site for 10 min at each site with sterile gauze.
7. Cover site with a band-aid or sterile gauze. Remove in 4–6 hours.

### Removing Needles

#### Supplies

- Clean drape or towel
- Gauze, 2–4 (2x2 inch) squares
- Tape (1 inch and ½ inch)