

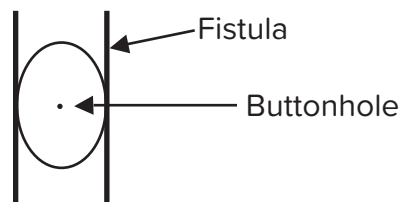
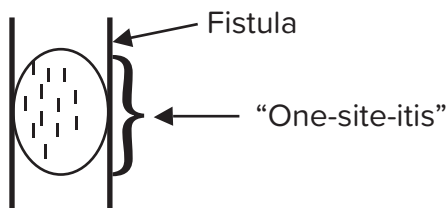
What is buttonhole needling?

Buttonhole needling is a way of putting needles into your fistula. Instead of rotating the sites, two sites are chosen (one for each needle) and used all the time. Needles are put in exactly the same spots at exactly the same angle. After about 8 – 18 times, scar tissue forms around the needle into a tunnel – like a pierced earring hole. The tunnel helps to guide the needles into your fistula. The small holes, next to each other, look like holes in a button.

Buttonhole needling works very well for those that self-needle.

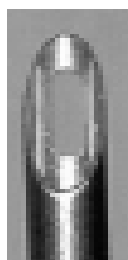
You have been told not to let staff put needles in the same place because that could cause an aneurysm. How is this different?

In the figure below, 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 figure above, the needle goes in the exact same hole every time – this does not cause an aneurysm.

Why are “blunt” (dull) needles used?



Once a buttonhole track is formed, blunt (dull) needles are used to needle the fistula. Blunt needles are rounded on the top and do not have a sharp, cutting edge like standard dialysis needles do.

Blunt needles help to prevent problems like cutting or scraping the track that can cause oozing around your needles during dialysis. They also reduce the chances of needle infiltration.

Why might you want buttonhole needling for your fistula?

Buttonhole needling can result in:

- Fewer infiltrations (swelling that happens when the needle goes through the fistula wall).
- Fewer missed attempts to place needles.
- Less pain when putting in needles.

Infection is a risk with buttonhole needling. It is important that you use the correct needling technique and know the proper care for your buttonhole sites.

How do you care for buttonhole sites and tracks?

Pre- and Post- Dialysis Care (at Home or in the Dialysis Centre)

- Before dialysis, wash your hands and your fistula with warm water and antibacterial soap. Do not apply anaesthetic cream (e.g., Emla).
 - After dialysis, hold your own needle sites using gentle pressure for 10 minutes. Press at the needle site and just above. If the needle site is still bleeding after 10 minutes, reapply pressure for another 5 minutes.
 - When the bleeding stops:
 - Apply antimicrobial gauze and tape in place; OR
 - Use a sterile swab tip applicator and apply Mupirocin cream about the size of a pea to each site (one applicator per site). Make sure the tube of the cream does not contact the skin. Cover the sites with a sterile gauze and tape in place.
 - Remove the gauze in 4 – 6 hours. If Mupirocin cream was applied, wipe away excess Mupirocin cream.
- ### *Everyday Care (at Home)*
- Keep your buttonhole sites clean. Every day, wash your arm with soap and rinse with water. Clean your buttonhole sites. Pat dry around the sites using a clean towel. You may shower, swim or use hot tubs if you have buttonhole tracks.
 - Protect your buttonhole sites:
 - Do not apply body lotions or creams, perfume or powders in the area of your buttonhole sites.
 - Avoid hitting or touching the sites.
 - Avoid activities that may irritate or cause harm or injury to your sites (e.g. scratching).
 - Avoid picking the scabs on your buttonhole sites.
 - Inspect your buttonhole sites and the skin around them daily. Contact your kidney doctor (nephrologist) or dialysis unit if:
 - There is redness, warmth or pain in the area of your buttonhole sites or on your fistula arm.
 - There is oozing or drainage from one of your buttonhole sites or your fistula.
 - You have noticeable swelling or itching at one of your buttonhole sites or in your fistula arm.
 - You have difficulty moving your fingers in your fistula arm.
 - You are feverish, and have any of the above symptoms.
 - If your fistula starts to bleed, apply gentle pressure for 10 minutes using a clean towel or gauze. **If the bleeding does not**

stop, keep applying pressure and go to emergency. Let your hemodialysis team know as well. It is a good idea to carry gauze with you.

What do you do if you are on vacation?

Each person needles buttonhole tracks in a slightly different way. It is best to limit the number of people that needle your tracks to avoid problems.

If you have buttonhole tracks and are on vacation:

If you are able to self-needle:

- Take your own needles with you and continue to self-needle.
- Take extra needles in case one gets contaminated.

If you are not able to self-needle:

- Tell the staff at the dialysis centre that you have buttonhole tracks.
- Do not let the nurse at the centre needle your buttonhole track.
- Ask the nurse to needle your fistula using sharp needles placed at least 1 inch (2.5 cm) away from the buttonhole sites and in the same direction as the buttonhole track. Remind him/her not to use sharps in the buttonhole track and avoid needling into the track.

Where can you learn more about self-needling and the buttonhole method?

- Talk with your kidney doctor or nurse.
- Home Dialysis Central Website:
 - Dialysis patient Bill Peckham Self-Cannulates Using the Buttonhole Technique. www.youtube.com/watch?v=37W0h5Cobdk
 - Starting a Buttonhole & Cannulating a Buttonhole (with step-by-step instructions) www.homedialysis.org/life-at-home/articles/dialysis-needles-self-cannulation-and-the-buttonhole-technique
- National Kidney Foundation
 - www.kidney.org/atoz/content/buttonhole-technique (with step-by-step instructions)