

Clinical Staff Guide To Using The Xtra-Med Buttonhole Fistula Needle In Line With The British Renal Society Clinical Practice Recommendations For Buttonhole Cannulation

1. Ensure the patient has washed their hands and fistula limb.
2. Ensure you have read the patient specific instructions for cannulating these buttonhole sites in relation to angle of insertion, depth and any other unique characteristics to be considered.
3. Clean the cannulation sites with 0.5% - 2% chlorhexidine gluconate with 70% isopropyl alcohol, or follow your hospital specific disinfection protocol. Ensure you follow the manufacturer specific instructions for **contact and drying time** by timing your activity. If the patient is allergic to Chlorhexidine, then Povidone Iodine solutions or Octenalin can be used.
4. Remove the sterile scab pick from the first needle cover by sliding it upwards.
5. Very carefully remove the scab from the first buttonhole site by utilising the bevel of the pick to get underneath the edge of the scab and remove it in one piece. Avoid invasive digging or scraping of the site to preserve the integrity of the mouth of the buttonhole track.
6. Remove the sterile pick from the second needle and repeat step 5 on the second buttonhole site.
7. Clean the cannulation sites for a second time, now that both scabs are removed with 0.5% - 2% chlorhexidine gluconate with 70% isopropyl alcohol, or follow your hospital specific disinfection protocol. Ensure you follow the manufacturer specific instructions for **contact and drying time** by timing your activity. If the patient is allergic to Chlorhexidine, then Povidone Iodine solutions or Octenalin can be used.
8. Double check that the patient's arm and hand are in exactly the same position as the last time cannulation took place.
9. Remove the protective cover from the first buttonhole needle and hold the needle by the tubing just behind the wings.
10. Gently glide the needle into the buttonhole track, avoiding excessive force. Whilst doing this, ask the patient for feedback to determine if the needle feels as it should when it is being glided in. Ensure that 1 - 2mm of the steel shaft of the needle is visible at the mouth of the buttonhole site to avoid hubbing (stretching of the mouth of the buttonhole by pushing the needle in too far up to the hub or neck of the needle). Do not rotate the needle.
11. Secure the needle in place ensuring that the needle position is not altered during this step.
12. Repeat steps 9—12 for the second buttonhole site.

Trouble shooting

If you meet resistance and cannot glide the needle in easily, firstly check the hand and arm position of the patient, a small adjustment can often set the track in the correct position and allow the needle to glide in. If this is not successful, take a second new buttonhole needle and attempt to glide it into the track. If this is not successful you will need to do a standard sharp cannulation for this session, this must be done at least 2cm above the buttonhole site. If space is not available above the buttonhole site then a site of at least 2cm below the buttonhole site can be used. At the next session you can attempt to cannulate via the buttonhole track again.