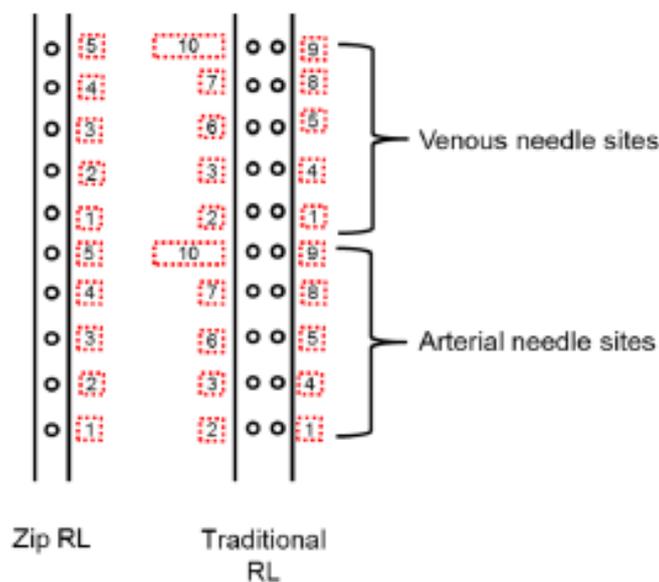


## Clinical Staff Guide To Rope Ladder Needling In Line With The British Renal Society / VASBI Clinical Practice Recommendations For Needling Of Arteriovenous Fistulae And Grafts For Haemodialysis

- i) Prior to needle insertion, documentation of previous needling should be reviewed along with the documented rope ladder needling plan. The plan should contain the rope ladder technique previously agreed for this specific patient which can be one of 2 techniques:
- a) Zip rope ladder where needling sites are in the centre of vessel and each needling site is above the previous site. This can be used with all AV fistulae and grafts.
  - b) Traditional rope ladder where needling sites move side to side as well as up the vessel. This can be used with AV fistulae or graft with diameter wider than 0.9mm and may minimise damage from repetitive needling over short lengths. However, caution needs to be taken to perform this technique in a systematic manner.



- ii) Prior to needle insertion, a good assessment of the vessel should provide a clear idea of the depth and direction of the needle insertion which will result in the correct position of the needle in line with documented rope ladder needling plan.
- iii) Ensure the patient has washed their hands and fistula limb.
- iv) Clean the cannulation sites using the disinfectant solution recommended by your hospital. Ensure you follow the manufacturer specific instructions for **contact and drying time** by timing your activity.
- v) Position and activate the tourniquet to AV fistula but not AV graft.
- vi) Ensure you have identified the correct cannulation sites on the rope ladder sequence for this specific treatment date. Cannulation sites should be 0.5-1cm above previous sites unless contra-indicated or commencing needling at the bottom of the vessel as previous sites reached the top of the needling segment.
- vii) Insert the pre-specified (correct gauge and length) fistula needle bevel up in an accurate, considered, gentle and continuous manner, minimising pain and discomfort for the patient. The needle insertion is a balance between prompt insertion of the needle and a gentle technique, so whilst insertion should not be rapid, it also should not be unnecessarily prolonged. The needle insertion should aim to finish with the tip of the needle in the centre of the AV access vessel.
- viii) Do not rotate the needle.
- ix) Secure the needle in place ensuring that the needle position is not altered during this step.