PreSep Oximetry Catheter
CVC Insertion

NOTE: Before beginning procedure, assure defibrillator, monitor (ECG, SpO2, NIBP), and ACLS drugs are available. Calibration of oximetry can be performed via pre-insertion (in vitro) or post insertion (in vivo).

1. Prep the anticipated insertion site (IJ or subclavian) with 2% Chlorhexidine solution per manufacturer’s instructions.
   - Confirm: Use of full body fenestrated drape; clinician use of surgical hat, mask, eye protection, in addition to sterile gown and gloves.
   - Local anesthesia should be used if patient is not under general anesthesia.

2. With the patient in a 15-25 degree Trendelenburg’s position, a 22 gauge finder needle may be used in conjunction with ultrasound guided visualization to locate the vessel.
   - Insert 18 gauge thin wall needle or over-the-catheter needle and relocate the vein using ultrasound-guided placement. Upon aspiration of venous blood, remove the syringe and insert guidewire.
   - Caution: Request the spontaneously breathing patient to hold their breath when any catheter or needle hub is opened to air to decrease risk of air embolus.

3. Insert the “J” tip of the guidewire into the needle or catheter hub by using the installed straightener. Advance the guidewire and gently manipulate if needed. The guidewire should never be forced. If difficulty is met during insertion of the guidewire, completely withdraw the guidewire and reattempt insertion.
   - Caution: Observe ECG for arrhythmias during guidewire insertion.
   - Remove the catheter or thin-wall needle, leaving the guidewire in place.

4. Enlarge the insertion site by placing a nick in the skin next to the guidewire with a no. 11 blade followed by threading the dilator over the guidewire. Rotate the dilator as it enters the tissue.
   - Check: Was nick and dilation of tissue adequate for thickness of patient skin?

5. Leaving the guidewire in place, remove the dilator and thread the PreSep catheter distal lumen over the guidewire through the tissue and into the vessel at a depth appropriate for the patient’s size and insertion site.
   - Caution: Positioning the distal tip of the catheter in the right atrium or ventricle is NOT recommended.
   - Remove the guidewire and assure that venous blood can be freely aspirated through each lumen, then flush and occlude each lumen or begin continuous infusion per hospital protocol.
   - Return the patient to a neutral position.

6. Once in position secure the catheter by suturing the integral suture wings to the skin.

7. The optional suture loop/box clamp can be used to anchor excessive residual catheter which is between the backform and insertion site. The box clamp prevents the residual catheter from migrating in and out of the tissue creating an infection control risk.
   - Assess for complications as well as proper tip position within SVC by CXR immediately after insertion.

8. Apply a sterile occlusive transparent dressing and assess site.
   - Observe the site for bleeding every 30 minutes for the first 2 hours after insertion.
   - Assess the need for catheter daily.
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References:

For professional use. CAUTION: Federal (United States) law restricts this device to sale by or on the order of a physician. See instructions for use for full prescribing information, including indications, contraindications, warnings, precautions and adverse events.

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