



London Health Sciences Centre

CENTRAL VENOUS OR ARTERIAL LINE INSERTION CHECKLIST and PROCEDURE RECORD

Date of Insertion (YYYY/MM/DD): _____

Time of Insertion: _____

ADDRESSOGRAPH

<p>Procedural Steps on the back page have been reviewed and followed: <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If no, document the reason why steps were not maintained.</p>	<p>Signature: _____</p> <p>Print Name: _____</p>
<p>Type of Catheter:</p> <p><input type="checkbox"/> Arterial</p> <p><input type="checkbox"/> PICC <input type="checkbox"/> Dialysis</p> <p><input type="checkbox"/> Introducer <input type="checkbox"/> Pulmonary Artery</p> <p><input type="checkbox"/> Multi-lumen <input type="checkbox"/> Other: _____</p> <p>Allergy to Catheter or Catheter Coating <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Catheter Model:</p> <p>Brand: _____ Model #: _____</p> <p>Length of catheter: _____ cm Diameter: _____</p> <p>Number of Lumens: _____</p> <p>PICC: External catheter at completion _____ cm</p>

PROCEDURAL CHECKLIST (Review back page before starting procedure)

Consent: Written (consent form or documented discussion) Implied

Verbal Emergency

Procedural Safety Pause completed as per back page

Relevant product allergies ruled out

Hand hygiene maintained

Site/skin care per protocol

Maximum barrier precautions maintained

Reason why any of the above steps (as described on back page) could not be maintained: _____

PROCEDURE

Side: Left Right **Arterial Site:** Radial Brachial Femoral Umbilical Other: _____

Venous Site: Basilic Brachial Cephalic External Jugular Internal Jugular Femoral Subclavian

Umbilical Other: _____

Technique: Percutaneous Cutdown Guide-wire exchange **Number of Attempts:** _____

Local Anesthetic: _____ **Ultrasound Guidance:** Static Dynamic N/A

Procedural sedation given

Mandatory Comments: Include indications for insertion, reason for variance from expected technique (e.g., guidewire exchange) and any complications.

Printed Name of Healthcare Professional Signature and Designation of Healthcare Professional

POST INSERTION LINE CONFIRMATION (CENTRAL LINES)

Line Confirmation (must be completed and signed for all central venous lines):

Chest x-ray confirmation of tip placement (all PICC, IJ or subclavian lines) Tip placement: _____

Complications by chest x-ray ruled out (e.g., pneumothorax ruled out by chest x-ray)

Confirmation of venous placement for all central lines (including femoral) by: Venous blood gas Venous pressure waveform (in monitored areas)

Time of Confirmation **Date of Confirmation (YYYY/MM/DD)** **Printed Name of Healthcare Professional** **Signature & Designation of Healthcare Professional**

**PROCEDURAL SAFETY PAUSE CHECKLIST
INSERTION OF CENTRAL VENOUS OR ARTERIAL LINE**

Before any procedure, review checklist together with the other members of the procedural team.

- Are there any contraindications or special concerns that should be considered/managed before starting (e.g., prolonged INR/PTT or bleeding risk, abnormal vascular anatomy, prior thrombosis or increased morbidity should a pneumothorax occur)
- Does the patient have allergies or contraindication to prep solutions, catheter materials or tapes?
 - Standard central line catheters are impregnated with chlorhexidine
 - Does the catheter contain latex, heparin or other antimicrobials?
- Does the individual performing this procedure have the knowledge, skill and experience to perform THIS procedure in THIS particular patient without assistance?
- Who else should be called to assist with this procedure (e.g., senior resident or consultant)
- Obtain consent (informal or formal) or notify family.
- Walk through the procedural steps and equipment requirements so team is prepared:

Equipment Considerations

- Ensure correct catheter size and LENGTH before starting (e.g., 15-16 cm for adult IJ/ SC catheter)
- Document size, type and model number in case of product recall or issues
- Central and Arterial Line Insertion trays with appropriate drapes/gowns are available from HMMS
- Prefilled saline syringes FOR USE ON A STERILE FIELD are required to flush each lumen of a central catheter before and after insertion (included in HMMS Central Line Insertion tray)
- Sterile ultrasound sleeve and gel (included HMMS Central Line Insertion tray)
- Obtain single use product for local anaesthetics
- Face mask with shield and hair net for everyone within 1 meter of sterile field
- Extra sterile gowns and gloves; required for everyone directly involved in the insertion procedure.
- Obtain sutures or sterile securement devices
- Dressing

Site Preparations

- Hair clippers (no razors) for hair removal (if required) prior to prepping skin
- Large 2% chlorhexidine with 70% alcohol prep (maxiswabs) require minimum 3 minute dry time

Other Preparation Considerations

- Hand hygiene before entering room, before donning sterile gown and gloves and after last patient contact/glove removal
- Ensure adequate analgesia and sedation is available
- Are extra personnel required for patient positioning?

- Discuss possible complications and review emergency management plans in advance including pneumothorax, inadvertent arterial cannulation during central venous catheter insertion, prevention/management of air embolism or hemorrhage/hematoma.
- Review PPE and hand hygiene requirements
- Confirm placement following insertion:
 - Following central line insertion, pressure monitoring waveform or blood gases need to be assessed to rule out arterial placement and is required immediately following insertion
 - Chest x-ray is required following upper extremity placement of a central venous line to confirm catheter tip location and rule out pulmonary complications
- Document procedure and complications