



Verification of Proficiency Evaluation for CVL Insertion UIHC Center for Procedural Skills & Simulation

Right IJ Central Venous Catheter

Evaluator:

Learner: Test

Date:

| | Steps | Satisfactory | | Comments |
|-----------------|-------|---|---|---|
| | | Y | N | |
| | 1 | Verbalizes that consent is obtained and demonstrates the timeout procedure | | |
| | 2 | Demonstrates pre-procedure U/S evaluation of IJ for patency | | Identify where target is. Pre-scan the neck to adjust U/S setting before donning sterile apparel |
| | 3 | Demonstrates the proper use of a gown, mask, hair cover, gloves and hand hygiene | | Maintain sterile field – PATIENT AREA & TRAY!! |
| | 4 | Verbalizes the use if available for EKG monitoring during the procedure to look for | | |
| | 5 | Demonstrates preparation of tray (prepare wire and needle, flush catheter) | | Remove items from tray that will not be needed. Flush ports (all 3), cover 2 ports and leave the middle one open |
| | 6 | Demonstrates proper prep and drape of patient | | Linear motion for prep. 8x8 prep size in case drape tears. |
| | 7 | Set up sterile sleeve with assistant without contamination | | Gown and glove AFTER sterile prep. |
| | 8 | Obtains adequate visualization of vessels and differentiates artery from vein | | U/S needs gel between cover & probe. Find a GOOD target. |
| Critical Metric | 9 | *Uses U/S correctly to visualize needle access into vessel | | Identify needle tip. Tilt the U/S probe, look for "bright spot." Only need 2cm of needle inserted |
| | 10 | Selects appropriate site for venipuncture | | Good area vs. bad area |
| | 11 | Simulates drawing up local anesthesia and simulates or verbalizes injection at appropriate insertion site | | Verbalize use lidocaine. Use straw, use label, switch to needle. Majority of central lines by anesthesia are done after patient is anesthetized |
| | 12 | Demonstrates needle entry at 35 to 45 degree angle, avoiding carotid artery | | Linear motion – DON'T change your angle |
| Critical Metric | 13 | *Venipuncture successful within three attempts | | Call for help if needed |



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| | | | | | | |
|-----------------|--|---|---|--|---|--------------|
| 14 | Confirms vessel entry by aspiration of venous blood | Y | N | Aspirate with needle as you inject | | |
| 15 | Inserts J wire into needle, advancing wire without resistance | Y | N | Take off guard to help | | |
| 16 | Removes introducer needle while controlling guide wire | Y | N | | | |
| 17 | Use Ultrasound to confirm wire is in the intended vessel | Y | N | REMOVE needle BEFORE confirming wire is in place | | |
| 18 | Demonstrates skin incision with #11 blade | Y | N | Don't cut the model | | |
| 19 | Passes dilator appropriate distance over wire, through skin and then removes dilator | Y | N | Only needs to be 1-2cm deep Go in deeper and you will fail! | | |
| 20 | Passes catheter over wire into "vessel" and removes wire | Y | N | Always control wire, it can disappear into the vessel, even while moving the cath | | |
| 21 | Demonstrates insertion of catheter the appropriate distance for IJ (10-15cm) | Y | N | 13-15 cm is okay | | |
| 22 | Simulates aspirating blood through catheter followed by flushing with saline | Y | N | | | |
| 23 | Demonstrates locking all lines and capping all ports with microclaves and swab caps after flushing with saline | Y | N | ALL lines | | |
| 24 | Demonstrates the securement of catheter with suture and applies dressing with gel over stick site by at least ¼ inch | Y | N | Suture on the pad, not the manikin. Application of dressing is a critical metric. Skin tie first, then same on the other side. Close to insertion site as psb. | | |
| Critical Metric | 25 | *Maintains sterile technique and field throughout procedure | | Y | N | |
| | 26 | Verbalizes need for Chest X-Ray post placement | | Y | N | IMPORTANT!!! |

| Global Score | 1 >4 N Inadequate use of U/S Many unnecessary/ Disorganized movements | 2 | 3 2-3 N Adequate U/S use Organized time/motion, Some unnecessary movement | 4 | 5 0-1 N demo U/S eval & guidance Maximum economy of movement and efficiency |
|---|---|---|--|---|--|
| FINAL RATING <input type="checkbox"/> Demonstrates proficiency <input type="checkbox"/> Requires further education | | | Summative Comments: Discuss sharps injures. *Critical Metrics – automatic fail if not done properly (9,13,25) | | |