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LSUHSC-Shreveport
Critical Care

Pulmonary Artery Catheter Placement

Purpose:

1. To determine hemodynamic pressures and/or volumes.
2. To provide assessment of left or right ventricular function.
3. To determine oxygen delivery and oxygen consumption.

Policy:

1. The nurse assigned to the patient shall be responsible for setting up for insertion, assisting with troubleshooting and recording parameters.
2. Pulmonary artery catheters inserted in the MICU are performed in the procedure room, unless otherwise indicated by the attending physician.
3. Fluoroscopy is used for PA catheter insertion as needed.
4. An informed consent shall be obtained prior to the insertion of a PA catheter from the patient or legal next of kin. If unable to obtain informed consent prior to insertion, the physician may declare the situation as emergent and documents as such in the progress note.

Equipment:

Transducer set-up	500cc Normal Saline
PA catheter	2000cc units heparin if ordered
Introducer kit	10cc syringes x3
OR minor pack	Sterile gloves
2-0 silk	Shoe covers, mask, cap
Sterile basin	Chlorohexidine button
	Transparent Dressing
Continuous Cardiac Output monitor	

Responsible Party

Action

MD	1. Obtain informed consent.
MD/RN	2. Educate family and or patient regarding procedure.
	3. Don surgical cap and mask.
	4. Prep insertion site with 4-minute chlorohexidine scrub.
	5. Primes and prepares transducers. See Transducer Set – Up policy.
RN	6. Open equipment/supplies forming sterile field and maintaining sterility of items opened. Maximum barrier precautions are used.

MD

7. Prepares transducers
8. Assist MD with gown and gloving
9. Performs 4-minute chlorohexidine scrub.
10. Drapes insertion site
11. Performs Time – Out Procedure
12. Attaches distal port to appropriate transducer and assures waveform on monitor
13. Flushes all ports of PA catheter
14. Checks the integrity of balloon with packaged 3cc syringe (automatically stops at 1.5cc)
15. Injects insertion site with Lidocaine
16. Performs venous stick.
17. Inserts guide-wire through needle. Checks guide-wire placement by fluoroscopy (if used), removes needle, leaving guide-wire in place. Never let go of guide-wire.
18. Enlarges site with blade.
19. Inserts introducer over guide-wire. The guide-wire is then removed.
20. Sutures introducer in place.
21. Inserts PA catheter.
22. The PA catheter is advanced through the introducer into the RA, then to RV, on into pulmonary artery where wedge waveform is seen under continuous pressure monitoring and/or fluoroscopy.
23. The PA waveform should be reproducible when the balloon is deflated, and the PCWP would be easily reproducible with 1.5cc of air.
24. Orders CXR
25. Covers the site with sterile dressing
26. Request CXR via computer system
27. Documents procedure in Nurses notes
28. Dresses site appropriately and secures PA catheter to patient
29. Connects PA catheter to CCO Monitor and obtains hemodynamics
30. Obtains hemodynamics Q 4 hours or as ordered by physician.

RN

MD

PA catheter placement

31. Documents procedure in procedure notes.

References:

1. Chulay, M. & Burns, S. (2006). AACN: Essentials of Critical Care Nursing.
2. Wiegand, D & Carlson, K. (2005). AACN: Procedure Manual for Critical Care.
3. Infection Control Guidelines IC 16