

SECTION: Cardiovascular

PROCEDURE FOR: Swan-Ganz Catheter: Insertion of

- PURPOSE:**
1. To provide measurement of pulmonary artery systolic, diastolic and pulmonary capillary wedge pressures, as well as right atrial pressure.
 2. To obtains blood specimens for mixed venous oxygen saturations from the distal (PA port).
 3. To provide measure of cardiac output by thermal dilution.
 4. Optional: To provide intravenous access for fluids and medications via the proximal (RA) port.

POLICY: Swan-Ganz catheters may be inserted in the Cardiac Cath Lab when deemed necessary by the responsible physician. Unless it is an emergency situation, the physician will obtain a signed informed consent.

EQUIPMENT: Transducer with tubing, transducer holder and pressure bag.
500cc N/S/ with Heparin 1000 units (label medication)
Thermodilution catheter
Sterile sheet, towels, gown and gloves
Mask(s)
Betadine solution

ASSOCIATED PRODEDURES: ICU-Unit Practive Manual: Hemodynamic Monitoring Protocol

PROCEDURE:

ACTION

POINTS OF EMPHASIS

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| <ol style="list-style-type: none">1. Briefly re-enforce physician's explanation to patient. Verify appropriate documentation as to need for the procedure. i.e., informed consent or emergency documentation in patient's chart.2. Make sure that all equipment is readily available in cath lab.3. Assemble IV flush system, making sure there are no air bubbles in the system. Purge IV bag of air. Make sure all connections of tubing are | <ol style="list-style-type: none">1. MD is responsible for consent.3. When air is flushed out of system turn most distal stopcocks 'off' to air so that no air continues to enter the system. |
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tight. Place dead end caps on all stopcocks.

4. Zero transducer so monitor is ready for hook-up.
5. Note that A-P diameter of patient's chest wall at the level of the sternal angle. Mark the midpoint on this line with indelible pen. The pressure transducer is positioned 'level' with this mark with the patient supine. All pressures are recorded using this reference point as the zero level.
6. Provide a mask for each individual in the room during the insertion. Assist MD who will be inserting the catheter to get into sterile gown.
7. When MD has inserted the introducer, flush the line with normal saline or heparin solution (per MD preference).
8. Physician will then hand the RN or CVT the ends of the ports to be attached to the transducer and the flush system. Attach the flush system appropriately.
9. As the catheter is advanced through the heart chambers, monitor patient's ECG pattern for any new ectopy. Obtain recordings of wave forms at central station, if asked.
10. Apply DSD to insertion site, if swan is to remain indwelling. Secure catheter adequately, but allow some distance for the patient to move about in bed.

REFERENCE: ICU Standards Committee
Nursing Standards Committee

CREDENTIALS: RN

EFFECTIVE DATE: 1/98, 12/00, 12/03