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## CARDIAC CATH LABORATORY POLICY AND PROCEDURES

Policy/Procedure "L"

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### LEFT HEART CATHETERIZATION

#### PURPOSE

To describe the process for assisting with a left heart catheterization procedure.

#### POLICY

1. Left heart catheterization will be performed on a scheduled basis to assist in diagnosis of coronary disease, valvular heart disease, congenital heart disease, cardiomyopathy, restrictive heart disease, CHF, pericardial disease or pre-operative screening. Left heart catheterization procedures may also include a right heart catheterization. The nurse will admit and assess the patient according to the Conscious Sedation Protocol.

#### ADDITIONAL INFORMATION

Considerations:

1. Check chart for following:
  - a. Permit for left heart cath
  - b. Current CBC, Chem 7
  - c. EKG, chest x-ray if ordered. PT/PTT, if appropriate.
  - d. Verify pre-op medications were given
  - e. Check Cardiac Catheterization pre-op list
2. **Staffing**
  - a. Minimum of one RN in room
  - b. One scrub to assist physician
  - c. One circulator for supplies. Scheduling
    - a. Schedule approximate time with physician
    - b. Allow 1 hour time slot. More time will be allotted if possibility of intervention.

#### Equipment/ Supplies:

1. Cardiac cath tray
2. Manifold kit
3. 2% Xylocaine and 0.5 Marcaine 10cc on tray – (20cc)
4. 2 - 3ml plastic syringes for blood oxygen SAT or ACT collection
5. 0.035 Guidewire (0.25 guidewire available)
6. 6Fr introducer
7. Medications
  - a. Heparin
  - b. Protamine (if indicated)
  - c. Lidocaine and Atropine readily available
  - d. Neosynephrine or Aramine – readily available

- e. NTG – SL and IV
  - f. Dopamine drip
  - g. Benadryl IV
  - h. Emergency Drugs
8. See Right heart Catheterization Procedure if RHC is to be performed.

**PROCEDURE**

**CCL staff**

1. Admit patient to lab per protocol, connect patient to NIBP, pulse oximeter, and EKG monitor.
2. Prep and drape Femoral area
3. MD will cannulate artery
4. Monitor person will record Left Heart pressures
  - a. Pressure measurements should be taken with the zero- reference level for the transducer at mid chest level with the patient supine.
  - b. Recording format: All EKG waveforms are recorded with a standard EKG timeline grid of 0.04 sec. Timelines.
  - c. Pressure wave contours are recorded on a waveform grid that allows a standardized full scale deflection of 10cm with 1cm gradations of full scale deflections in ranges of 20 mmHg. Timeline intervals of 0.02 sec. are recorded at the bottom margin of the waveform grid.
  - d. If RHC indicated also, selection of proper speed and full scale deflection range in recording the different pressure pulses is required to obtain necessary detail of waveform contours.
    - 1) RA, RV, PA, PAW are recorded on 25 mmHg or 50 mmHg range at a50 mm/sec paper speed. Mean pressure and phasic waveforms are recorded. The computer scale is set on 40 mmHg or 100 mmHg if hypertensive.
5. Circulator will assist with thermodilution cardiac outputs
6. Circulator will obtain O2 saturation samples from scrub and run in cooximeter
7. Scrub will assist physician with insertion of diagnostic catheters for coronary angiography.
8. Scrub will assist with panning table.
9. Staff will assist MD if case develops into an interventional procedure. (See related interventional policies)
10. Check computer results for accuracy by verifying with HP waveform printout
11. Remove femoral sheath according to protocol
12. Return patient to floor according to Cath Lab Discharge Criteria
13. All documentation is done to meet the Cardiac Cath Lab Standards of Care and Conscious Sedation Policy.
14. Three copies of reports are printed; one for the chart, one for the MD, and one for the Cardiac Cath Lab.

**PERFORMED BY: Staff**

**OSHA EXPOSURE CATEGORY:** *Mark the most appropriate category with an "X"*

Category I	Requires protective equipment be worn	X
Category II	Does not require but includes the potential for the use of protective equipment	
Category III	Does not require protective equipment	

SAMPLE ONLY  
NOT FOR USE