

HOSPITAL

DEPARTMENTAL PROCEDURE

TITLE: TRAUMA: INSERTION OF ARTERIAL LINE

Date Adopted: 05/02

Date Revised: 5/15

Supersedes:

Date Reviewed: 5/15

DISTRIBUTION:

Nursing

STAFF LEVEL:

RN, GN, LVN, GVN

PROCEDURE:

Indication

1. Invasive monitoring of arterial blood pressure.
2. May be required for massive fluid resuscitation, titration of vasoactive drugs and calculation of cerebral perfusion pressure.

Equipment

- Transducer tubing
- Pressure cables for monitor
- 500cc NS
- arterial line kit
- Sterile dressing kit

Procedure

1. Prime transducer tubing with NS while removing **ALL** air bubbles (do not prime with fluids under pressure).
2. After tubing is cleared of air bubbles, place IV fluids in a pressure bag and inflate to 300 mm Hg.
3. Connect transducer to pressure cable/monitor.
4. Physician will clean selected site (radial or femoral) and insert arterial catheter.
5. Once blood returned, connect catheter to transducer tubing and flush catheter.
6. Level transducer with patient's heart.
7. Turn stopcock off to patient.
8. Remove yellow cap and zero the monitor.
9. Replace cap and turn stopcock to neutral and flush line.
10. Monitor should now have appropriate wave form and BP.
11. Place a sterile dressing per the Central Venous Catheter/PICC site care policy.

Nursing Assessment

1. Observe site for bleeding/hematoma.
2. Monitor circulation distal to catheter.

3. Observe wave form dampening (may be positional).

Complications

1. Bleeding
2. Occlusion of artery
3. Embolus/thrombus
4. Infection
5. Arterial spasm

REFERENCES:

American Association of Critical Care Nurses, *AACN Procedure Manual for Critical Care*, 2010, Sixth Edition, W.B. Saunders Company, Philadelphia, Pennsylvania.

American College of Surgeons, *Advanced Trauma Life Support*, 2014, Seventh Edition, Chicago, Illinois.

SIGNATURES:

Originating department / committee _____

Signature _____

Executive Leadership:
