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## Arterial Puncture

### Purpose:

1. To provide an alternate method for obtaining blood samples when a venous stick is not possible and an arterial line is not present.
2. To provide a means to obtain ABGs when an arterial line is not present.

### Policy:

1. A physician's order shall be written for lab specimens needed.
2. The procedure shall be explained to the patient if possible.
3. Necessary supplies should be gathered prior to procedure.
4. An Allen's test shall be performed prior to procedure to ascertain collateral circulation to extremity used.
5. Aseptic technique shall be used.
6. Pressure shall be held directly over site 3-5 minutes, or until bleeding stops after procedure.
7. Site of arterial stick shall be re-inspected 5-10 minutes after pressure held.
8. Procedure, lab and results should be documented.

### Procedure

#### Responsible Party

RN

#### Action

1. Note physician order for lab needed.
2. Gather equipment needed:  
Chlorohexidine swab, 3 x 3 topper, ABG syringe or 20-21 gauge needle/butterfly with appropriate syringe added
3. Perform Allen test, notes collateral circulation.
4. Explains procedure to patient if possible.
5. Wash in accordance with Hand Hygiene guidelines.  
[http://www.sh.lsuhscc.edu/policies/policy\\_manuals\\_via\\_ms\\_word/infection/IC%20%202.0.pdf](http://www.sh.lsuhscc.edu/policies/policy_manuals_via_ms_word/infection/IC%20%202.0.pdf)
6. Preps site with antiseptic solution.
7. Inserts needle at 45° angle through skin.
8. Watch for flashback in hub of needle, then aspirate blood sample sufficient for lab needed.
9. Withdraw needle, hold pressure 3-5 minutes with topper directly over site.
10. Observe site, continue to hold pressure if bleeding or swelling continues.

RN/Clerk  
or ABG Tech/RT  
ABG Tech/RT

RN/ MD

11. Monitor site within 5-10 minutes after bleeding stopped.
12. Places dressing over site.
13. Washes hands.
14. Order lab test in computer
15. Run ABG and return results to RN/MD.
16. Document procedure and lab results.

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 2.0

