

PROCEDURE FOR: Arterial Blood Gas Punctures by Registered Nurses

POLICY: Radial or brachial arterial blood gases may be drawn by ED RNs only after instruction and observation by MD/RN/RRT of at least 3 successful procedures.

EQUIPMENT: Arterial Blood Gas Sampling Kit
Gloves
Arterial Blood Gas Requisition Form

PROCEDURE:

| <u>ACTION</u> | <u>POINTS OF EMPHASIS</u> |
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| 1. Obtain Arterial Blood Gas Sampling Kit and assemble. | |
| 2. Explain procedure to patient. | |
| 3. For a radial arterial stick, perform an Allen's test. | 3. Assess collateral circulation from the ulner artery. |
| 4. Locate arterial pulse. Cleanse skin with alcohol wipe or other antiseptic solution. | |
| 5. Using 45° - 60° angle, puncture the skin with needle toward the pulsating vessel. Once the needle has entered the arterial lumen, the syringe plunger should be allowed to rise with arterial pressure to minimize the chances of venous sampling. Obtain at least 3 ml of blood. | 5. If no blood flow is obtained, the needle should be withdrawn slowly. Redirection of the needle should occur only when the needle has been retracted to the level of the dermis. |
| 6. The needle is removed from the artery and firm pressure is applied at the puncture site for a minimum of 5 minutes. | 6. Ten to 15 minutes of pressure may be required if the patient is on anticoagulant therapy or has another coagulopathy. |
| 7. Expel any air bubbles that are present in the syringe. Remove needle, replace with plug and place labeled specimen in for transport to the pulmonary lab. | |

APPROVAL: Nursing Standards Committee
Emergency Department Unit Review

EFFECTIVE DATE: 1/95

REVISION DATES: 10/99, 12/02, 3/06

REVIEWED DATES: 9/08