

Student Name: _____

Arterial Puncture (ABG Analysis) Checklist

Objective: To perform an arterial puncture for blood gas analysis according to the standard of care.

- ☐ Verify the practitioner's order.
- ☐ Gather and prepare the necessary equipment and supplies.
- ☐ Review medical record for anticoagulation therapy, clotting disorders, and allergies (lidocaine, antiseptics).
- ☐ **Confirm steady-state conditions:** Wait 20–30 mins after O₂ starts, 20 mins after nebulizer, or 15 mins after suctioning/ventilator changes.
- ☐ Perform hand hygiene.
- ☐ Confirm the patient's identity using at least two identifiers.
- ☐ Provide privacy and explain the procedure to the patient and family.
- ☐ Raise the bed to waist level.
- ☐ Perform hand hygiene.
- ☐ Assess radial pulses in both wrists.
- ☐ **Perform Modified Allen Test** (or pulse oximetry/Doppler) to assess collateral circulation. If negative, select another site.
- ☐ Position the patient with a rolled towel under the wrist and identify anatomic landmarks.
- ☐ Clean the site with soap and water if visibly soiled, then dry.
- ☐ Perform hand hygiene and put on gloves and necessary PPE.
- ☐ Administer local anesthetic (e.g., lidocaine 1%) if ordered and wait for effect.
- ☐ Clean the puncture site with an antiseptic pad and allow it to dry completely.
- ☐ Stabilize the artery with the nondominant hand; hold the syringe with the other.
- ☐ Hold the preheparinized syringe with the **needle bevel up at a 30- to 60-degree angle**.
- ☐ Puncture the skin and arterial wall in one motion.
- ☐ Watch for **pulsatile blood backflow**; do not pull back on the plunger.
- ☐ Obtain 1 mL of blood.
- ☐ Withdraw the needle while stabilizing the syringe.
- ☐ **Apply firm pressure** with gauze for at least 5 minutes (10–15 mins for patients on anticoagulants).
- ☐ Check for and remove air bubbles by holding the syringe upright.
- ☐ Activate the needle safety device, remove the needle, and place a rubber cap on the syringe tip.



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- ☐ **Roll the syringe gently** for 30 seconds to mix the heparin.
- ☐ Label the specimen in the presence of the patient.
- ☐ Place the sample in a biohazard bag and send immediately to the lab.
- ☐ Apply an adhesive bandage once bleeding stops.
- ☐ Monitor the site for bleeding and signs of circulatory impairment.
- ☐ Return the bed to the lowest position.
- ☐ Discard used supplies and remove PPE.
- ☐ Perform hand hygiene.
- ☐ Document the procedure (including FiO₂ or O₂ flow rate and puncture site).

Evaluation & Verification

Instructor Name: _____ Signature: _____

