

CONSIDERATIONS:

1. While reconciling the patient's medications, note any drugs that treat hyperglycemia/diabetes:
 - a. Patients taking anti-hyperglycemics have usually been instructed to measure blood glucose. Ask about blood glucose testing schedule
 - b. Patients/caregivers should periodically have their blood glucose testing skills reassessed
2. While developing Plan of Care indicate "Capillary blood glucose testing" and then indicate:
 - a. Who will do testing (patient or caregiver)
 - b. How frequently it will be done (include a specific frequency/time and "as needed")
 - c. Parameters for alerting physician
3. When assessing and training patients/caregivers in blood glucose monitoring, incorporate the following components:
 - a. Assess the patient's/caregiver's knowledge of the purpose and importance of the procedure
 - b. Identify barriers to blood glucose testing and explore with patient/caregiver
 - c. Assess the patient's/caregiver's ability to properly use his/her blood glucose meter and lancing device. If patient/caregiver does not demonstrate proficiency, encourage practice with you until the technique is consistently accurate
 - d. Teach the principles and importance of quality control:
 - i. Test meter/strips with quality control solutions
 - ii. Teach patient and/ or caregiver to check test strips for expiration date
 - e. Teach patient and/or caregiver proper disposal of supplies and compliance with state/local sharps disposal regulations
4. Refer the patient/caregiver to written instructions included with the glucometer, to reinforce instruction points of the procedure. Good teaching resources are the manufacturers' Quick Guides to the lancet device and blood glucose meter.
5. To assure a good fingerstick with an adequate drop of blood:
 - a. Use an automatic lancing device
 - b. Assure patient's hand is warm
 - i. Wash hands in warm water until hands are warm
 - ii. Rub hands together vigorously
 - c. Hang arm down for 30 seconds
 - d. Prick finger with hand below heart
 - e. Hold the lancet down firmly; the more firm, the deeper the puncture
6. If only a small drop of blood forms, do not squeeze to obtain the drop of blood needed for the test. This causes capillary fluid to dilute the blood specimen.

Instead gently massage the hand towards the proximal portion of the finger and then press firmly on the distal joint of the finger.

7. See *Lab & Specimens - Capillary/Fingerstick* for more detailed instructions on fingerstick technique.
8. Strips and glucose meters are designed and calibrated for capillary blood only. Do not apply blood obtained by venipuncture to obtain blood glucose reading.

EQUIPMENT:

Blood glucose meter
Test strips appropriate to glucose meter
Gloves
Antiseptic/alcohol wipe
2 x 2 gauze pad or cotton ball
Automatic lancing device, either self-activating or button activated
Sterile single-use lancet specific to the lancing device
Puncture-proof container
Impervious trash bag

PROCEDURE:

1. Adhere to Standard Precautions, explain procedure to patient/caregiver and assemble the equipment on a clean surface.
2. Review the manufacturer's instructions for the particular blood glucose meter and lancing device the patient uses.
3. Assemble the equipment on a clean surface close to the patient. Assure sharps container is "at hand."
4. Ask patient to wash hands in warm soapy water.
5. Have patient/caregiver place the lancet in the lancing device. If nurse is performing the fingerstick, a safety lancet must be used.
6. Prepare site for test:
 - a. If patient performs own stick, he/she can rely on washing hands with warm soapy water, but if preferred can use alcohol pad and be sure to air dry before pricking finger.
7. Have patient/caregiver place test strip in meter so it is turned on and ready for the blood specimen.
8. Patient will firmly place the finger puncture device to the finger and activate the device.
9. Patient/caregiver will allow drop of blood to form. If blood flow is inadequate, prompt patient/caregiver to gently massage the hand towards the proximal portion of the finger and then press firmly on the distal joint of the finger.
10. Patient/caregiver will absorb the blood drop with the test strip.
11. Follow glucose monitor's directions for completing the test.
12. Patient/caregiver should place firm pressure on puncture site with gauze sponge until bleeding stops.

13. Patient/caregiver will discard soiled supplies in appropriate containers, including dropping lancet in sharps container.
14. Patient/caregiver will record reading in Blood Glucose Log.

AFTER CARE:

1. Document in patient's record:
 - a. Time of testing in relationship to medication, food, and activity/exercise
 - b. Results of blood glucose monitoring and comparison to the blood glucose target range
 - c. Patient's response to procedure
 - d. Instructions given to patient/caregiver and ability to teach back
 - e. Presence of any signs or symptoms of hyper/hypoglycemia
2. Teaching and coaching:
 - a. Instruct and support patient/caregiver in use of a recordable document (paper, electronic) to log blood glucose values
 - b. Encourage patient/caregiver discussion about the experience, blood glucose results, confidence and commitment to performing the procedure
 - c. Guide and support the patient/caregiver in performing the procedure independently
 - d. Update the care plan to reflect the identified ongoing patient/caregiver educational needs
3. Communicate with the physician about:
 - a. Acceptable parameters
 - b. Values outside of acceptable parameters

REFERENCE:

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