19.8: Checklist for Blood Glucose Monitoring

Use the checklist below to review the steps for completion of “Blood Glucose Monitoring.”

Steps

Disclaimer: Always review and follow agency policy regarding this specific skill.

1. Prepare before completing the procedure:
   ◦ Review the patient’s medical history and current medications.
     ▪ Note if the patient is receiving anticoagulant therapy. Anticoagulant therapy may result in prolonged bleeding at the puncture site and require pressure to the site.
     ▪ Assess the patient for signs and symptoms of hyperglycemia or hypoglycemia to correlate data to pursue acute action due to an onset of symptoms.
     ▪ Determine if the test requires special timing, for example, before or after meals.
       ▪ Blood glucose monitoring is typically performed prior to meals and the administration of antidiabetic medications.

2. Gather supplies: nonsterile gloves, alcohol swab, lancet, 2" x 2" gauze or cotton ball, reagent strips, and blood glucose meter.
   ◦ Determine if the blood glucose meter needs to be calibrated according to agency policy to ensure accuracy of readings.
   ◦ Read and understood the manufacturer’s instructions and agency policy for the blood glucose meters.

3. Perform safety steps:
   ◦ Perform hand hygiene.
   ◦ Check the room for transmission-based precautions.
Introduce yourself, your role, the purpose of your visit, and an estimate of the time it will take.

Confirm patient ID using two patient identifiers (e.g., name and date of birth).

Explain the process to the patient and ask if they have any questions.

Be organized and systematic.

Use appropriate listening and questioning skills.

Listen and attend to patient cues.

Ensure the patient's privacy and dignity.

Assess ABCs.

4. Have the patient wash their hands with soap and warm water, and position the patient comfortably in a semi-upright position in a bed or upright in a chair. Encourage the patient to keep their hands warm. Washing reduces transmission of microorganisms and increases blood flow to the puncture site.
   - Agency policy may require use of an alcohol swab to clean the puncture site.
   - Ensure that the puncture site is completely dry prior to skin puncture.

5. Remove a reagent strip from the container and reseal the container cap to keep the strips free from damage from environmental factors. Do not touch the test pad portion of the reagent strip.

6. Follow the manufacturer's instructions to prepare the meter for measurement.

7. Place the unused reagent strip in the glucometer or on a clean, dry surface (e.g., paper towel) with the test pad facing up, based on manufacturer recommendations.

8. Apply nonsterile gloves.

9. Keep the area to be punctured in a dependent position. Do not milk or massage the finger site:
   - Dependent position will increase blood flow to the area.
   - Do not milk or massage the finger because it may introduce excess tissue fluid and hemolyze the specimen.
   - Warm water, dangling the hand for 15 seconds, and a warm towel stimulate the blood flow to the fingers.
   - Avoid having the patient stand during the procedure to reduce the risk of fainting.

10. Select the appropriate puncture site. Cleanse the site with an alcohol swab for 30 seconds and allow it to dry. Perform the skin puncture with the lancet, using a quick, deliberate motion against the patient's skin:
    - The patient may have a preference for the site used. For example, the patient may prefer not to use a specific finger for the skin puncture. However, keep in mind their preferred site may be contraindicated. For example, do not use the hand on the same side as a mastectomy.
    - Avoid fingertip pads; use the sides of fingers.
    - Avoid fingers that are calloused, have broken skin, or are bruised.

11. Gently squeeze above the site to produce a large droplet of blood.
    - Do not contaminate the site by touching it.
    - The droplet of blood needs to be large enough to cover the test pad on the reagent strip.
    - Wipe away the first drop of blood with gauze.

12. Transfer the second drop of blood to the reagent strip per manufacturer's instructions:
    - The test pad must absorb the droplet of blood for accurate results. Smearing the blood will alter results.
    - The timing and specific instructions for measurement will vary between blood glucose meters. Be sure to read the instructions carefully to ensure accurate readings.

13. Apply pressure, or ask the patient to apply pressure, to the puncture site using a 2" x 2" gauze pad or clean tissue to stop the bleeding at the site.
14. Read the results on the unit display.
15. Turn off the meter and dispose of the test strip, 2" x 2" gauze, and lancet according to agency policy. Use caution with the lancet to prevent an unintentional sharps injury.
16. Remove gloves.
17. Perform hand hygiene.
18. Assist the patient to a comfortable position, review test results with the patient, ask if they have any questions, and thank them for their time.
19. Ensure safety measures when leaving the room:
   ◦ CALL LIGHT: Within reach
   ◦ BED: Low and locked (in lowest position and brakes on)
   ◦ SIDE RAILS: Secured
   ◦ TABLE: Within reach
   ◦ ROOM: Risk-free for falls (scan room and clear any obstacles)
20. Document the results and related assessment findings. Report critical values according to agency policy, such as values below 70 or greater than 300, and any associated symptoms. Read more about hypoglycemia and hyperglycemia in the “Blood Glucose Monitoring” section of this chapter.