ASSESSMENT & PREPARATION

Glucometer

Glucometers provide a rapid approximate measurement of whole blood glucose to help direct treatment.

USE FOR
- Initial assessment of all infants admitted to the neonatal unit
- Directing ongoing management for patients

STANDARD OF CARE
Glucose levels in all newborn patients should not fall below 2.5 mmol/L (45 mg/dL).

COLLECT ALL MATERIALS
- glucometer
- lancets
- glucometer strips
- alcohol
- cotton swabs

PREPARE DEVICE
Turn on device by pressing power button or inserting a glucometer strip into the port until you feel a “click”.

PREPARE PATIENT
Follow hand washing protocol and put on gloves.
- Manage patient’s pain
  - A) Clean skin on the outer edge of the patient’s heel using alcohol
  - B) When dry, prick foot on safe areas as indicated
  - C) Wipe away first drop of blood

CHECK GLUCOSE LEVEL
Collect second blood drop on tip of the glucometer strip.
Read and record glucose level.
- Treat according to ward protocol if glucose is less than 2.5 mmol/L.

CONCLUDE ASSESSMENT
Using a dry cotton swab, apply pressure to the heel to stop the bleeding.

COMPLICATIONS
- Bruising
- Bleeding
- Nerve or bone damage
- Pain
- Infection
- False readings

Ensure the glucometer is accurate for neonatal blood glucose range.
- Blood glucose samples should never be taken from the finger of a neonate.

DISINFECTION & INFECTION PREVENTION
- Clean hands with soap and water or alcohol before and after handling glucometer materials that will be used on patients.
- Always wipe the glucometer with 70% alcohol between patients.
- Dispose of strip in hazardous waste container.
- Dispose of used lancet in sharps container.
- Refer to the General Infection Prevention Module.
**Glucometer**

Glucometer and strips should be **stored in a clean, dry, and secure area**. Keep strips container tightly closed when not in use. Care should be taken to ensure that glucometers and strips **remain in the ward** and are accessible for use when required.

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**DAILY MAINTENANCE**

- Wipe the glucometer with alcohol using gauze or a cotton swab before first use and between patients.
- Do not submerge device or drip 70% alcohol onto glucometer strip reading slot.

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**PREVENTIVE MAINTENANCE**

- Perform calibration OR a quality control test on glucometers with control solution **every week** or when changing glucometer strip containers to ensure consistent results.

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**REPAIR & MAINTENANCE**

**If the glucometer is not turning on**

- Try inserting a glucometer strip until you feel a “click”

**If the glucometer is still not turning on**

- Replace the batteries

**If the glucometer is providing results consistently incompatible with the patients’ conditions**

- Check the expiration date of your glucometer strips. If the strips are expired, try using **non-expired strips**
- If results are still inconsistent perform a **quality control test** using control solution

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**CONTACT A TECHNICIAN OR MAINTENANCE DEPARTMENT IF DEVICE CONTINUES TO NOT WORK PROPERLY AFTER ADDRESSING THE COMMON ISSUES**