

MANAGEMENT OF DIABETIC HYPERGLYCEMIA

Hyperglycemia happens when there is too much sugar in the blood. Causes of hyperglycemia include missing doses of insulin or glucose lowering medicine, eating too much, infection, illness, and increased stress, decreased activity. Untreated hyperglycemia may lead to an emergency condition called ketoacidosis. If hyperglycemia continues for long periods of time, damage to nerves, blood vessels, and other organs may occur.

PURPOSE

To identify and treat a high blood sugar level.

APPLIES TO

- Registered Nurses
- Licensed Practical/Vocational Nurses
- Therapists
- Other (Identify): _____

EQUIPMENT/SUPPLIES

- Reagent strips to test urine for ketones, i.e., Ketostix.
- Equipment to perform blood glucose level test.

PROCEDURE

Note: It is important to follow the parameters and orders of the primary care physician or nurse practitioner when responding to a hyperglycemic incident.

High Blood Glucose Level (more than 180 mg/dl).

1. Assess the client for symptoms, which may include:
 - a. Increased urination.

- b. Increased thirst.
 - c. Feeling weak or tired.
 - d. Blurred vision.
 - e. Weight loss.
 - f. Slow healing cuts and sores.
 - g. Vaginal and skin infections.
2. Perform blood glucose level monitoring according to procedure.
 - a. Instruct the client to:
 - Follow the meal, medication, and activity plans properly.
 - If appropriate, follow sick day guides as given by the primary care Physician or nurse practitioner.
 - Test urine for ketones as ordered by physician.
 - Repeat blood glucose level every four hours until normal.

Very High Blood Glucose Level (over 350 mg/dl)

1. Assess the client for symptoms, which are the same as for high blood glucose level, but with:
 - a. Loss of appetite
 - b. Nausea, vomiting.
 - c. abdominal pain.
 - d. Dehydration (dry mouth and skin).
 - e. Fruity, acetone breath.
 - f. Deep, rapid breathing.
 - g. Drowsiness/restlessness.
 - h. Ketones in urine.
 - i. keto-acidosis, hyperosmolar coma.
2. If any of the above symptoms are present,

- a. Check the blood sugar
 - b. Call doctor if blood sugar is more than 300 mg/dl
 - c. Test ketones per physician orders
 - d. If the client is unconscious, call the emergency number to get help immediately.
3. Administer additional insulin as directed.
 4. Instruct the client to drink only fluids without sugar (tea, broth, or diet soda) often.
 5. If condition remains the same or worsens, instruct the client to go to the hospital.
 6. Prevention Guidelines to be reviewed with client/caregiver
 - a. Take medications as directed
 - b. Follow meal plan and dietary guidelines
 - c. Follow the exercise program
 - d. Check blood sugar levels regularly

DOCUMENTATION GUIDELINES

1. Document in the clinical record:
 - a. Blood glucose level.
 - b. Results of urine tests for ketones.
 - c. The client's symptoms.
 - d. Actions taken and results.
 - e. Insulin/fluids given.

RELATED PROCEDURES

Blood Glucose Monitoring, SubQ Injections/Insulin Administration