



**Lakeridge
Health**

MEDICAL DIRECTIVE

Point of Care Glucose Meter Testing and Treatment for Out-Patients with Suspected Hypoglycemia in the Diabetes Education Program

Approved by/Date: Medical Advisory Committee – June 25, 2013

Authorizing physician(s)

Dr. Rachel Chong

Dr. Angeline Chong

Dr. Theodore Monchesky

Authorized to whom

Nurses and dietitians working in the diabetes education program at LH who have received education and validation of glucose meter testing according to Ontario Laboratory Accreditation Standards (OLA).

Patient Description / Population

- Any outpatient 18 years of age or older at LH exhibiting signs or symptoms of hypoglycemia.
- Any outpatient 18 years of age or older suspected of having hypoglycemia.

Medical Directive Description/Physician's Order

The nurse/dietitian will obtain a capillary blood sample from a patient's finger upon suspecting hypoglycemia. The nurse/dietitian will perform a blood glucose meter test, and treat hypoglycemia as per protocol outlined below.

Patient/Population Description:

All LH Patients 18 years and over registered with the LH Diabetes Education Program.

Contraindications to implementing the Protocol:

- Patients unwilling or unable to provide blood sample.
- Patient less than 18 years of age
- Refusal of patient/family consent for testing and/or treatment; call code blue and 911 immediately

Originating Committee: RNS Program Council – Feb 26, 2013

Medical Advisory Committee: June 25, 2013

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Protocol Description:

- This protocol authorizes nurses and dietitians working in the LH Diabetes Education Program to test and initiate treatment for blood glucose levels less than 4 mmol/L (hypoglycemia) upon confirmation of blood glucose by POCT testing as outlined in Table 1.
The nurse/dietitian will determine what level of treatment is appropriate (mild/moderate or severe hypoglycemia) based on the blood glucose value and initiate the treatment according to Table 1.

Definitions

Hypoglycemia: is defined as an abnormally low blood sugar (less than 4 mmol/L) with the onset of either autonomic or neuroglycopenic symptoms, such as trembling, sweating, palpitations, weakness, confusion or drowsiness, which respond to fast acting carbohydrates (CDA 2008). The protocol provides a clear standard to ensure evidence based care is provided to treat all clients with hypoglycemia safely and competently.

Table 1:

Table with 3 columns: Blood glucose level, Treatment, and a header row for patient status (Conscious and able to swallow patient and not NPO). Rows include Mild-moderate hypoglycemia and Severe hypoglycemia with specific treatment instructions (glucose tablets or sugar packets).

*Sugar is not the preferred choice and cannot be used for patients treated with Acarbose.

- After treatment, wait 15 minutes: repeat blood glucose.
If blood glucose is less than 4 mmol/L, repeat protocol until blood glucose greater than 4 mmol/L.
If next meal is over an hour away give a snack of starch and protein or Glucerna™ (bar or liquid).



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Documentation requirements

The nurse/dietitian will document the utilization of the medical directive in the patient's health record as required by the College of Nurses of Ontario and College of Dietitians of Ontario. The assessment that led to the implementation of the Protocol, what was implemented, outcomes, evaluation and any follow-up must also be recorded. The nurse/dietitian will report all POC lab values in computer according to OLA standards. The treatment of a hypoglycemia episode must be documented in the patient's record as a "FAIR" note as follows:

- **Significant event** if blood glucose value 2.8 to less than 4 mmol/L
- **Critical event** if the blood glucose is less than 2.8 mmol/L

Specific conditions/circumstances that must be met before the Directive can be implemented

- The nurse/dietitian must have current validation at LH and the knowledge, skill and judgment to perform glucose meter testing and treatment of hypoglycemia.
- The patient 18 years of age or older must exhibit signs and symptoms of hypoglycemia OR is suspected of having hypoglycemia.

Contraindications to the implementation of the Directive

- The patient refuses consent.
- The health care professional is unable to obtain a blood capillary sample.

Identify relevant Delegated Control Act or Added Skill associated with this Directive

- Performing a procedure below the tissue of the dermis.
- Validation of blood glucose meter testing.

Review/Evaluation Process

The medical directive will be reviewed biannually by the supporting physician group and Laboratory Services Point of Care Advisory Committee.

The health care professional must maintain competency by yearly validation through glucose meter key trainers or POC technologists.

Related Documents

Hypoglycemia Protocol



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References

Building Competency in Diabetes Education: The Essentials, 2009
Canadian Diabetes Association 2008 Clinical Practice Guidelines for the Prevention and
Management of Diabetes in Canada
QMP-LS OLA Program requirements Version 5.1 December 2011.
Regulated Health Professionals Act, 1991