THE VALLEY HOSPITAL

PATIENT CARE SERVICES (PCS) POLICY & PROCEDURE

SUBJECT: Hypoglycemia

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SECTION 1: ADULT PATIENT

PURPOSE: To provide guidelines for management of adult patients experiencing hypoglycemia (Blood Sugar below 70 mg/dl with or without symptoms)

SUPPORTIVE DATA:

Hypoglycemia remains the most common acute complication of patients with diabetes mellitus, especially among insulin dependent patients (primarily Type 1) and Type 2 patients receiving insulin and/or a sulfonylurea oral medication.

WHO CAN PERFORM: Registered Nurse (RN)

Patient Care Associate(PCA) II, as delegated by RN

PROCEDURE:

- 1. Upon admission to nursing unit, assess the patient for signs and symptoms of hypoglycemia and remind patient with diabetes to call if symptoms of hypoglycemia are experienced. Patient MAY NOT experience symptoms but if so, examples of symptoms could include ANY of the following: Pallor, diaphoresis, irritability, tremors, confusion, headache, seizure, fast heartbeat, nervousness, anxiety, dizziness, or hunger.
- 2. If blood glucose is below 70 and symptoms are experienced OR if routine Accu-Chek blood glucose is below 70 mg/dl treat with 15 grams carbohydrate. Examples include the following:
 - ½ cup (4 oz) of any fruit juice (avoid orange juice if renal patient)
 - 8 oz. skim milk
 - 6 oz. regular soda
- 3. Recheck blood glucose again in 15 minutes. If blood glucose remains below 70 mg/dl treat again and recheck blood glucose in 15 minutes. Continue to retest every 15 minutes and repeat treatment UNTIL blood glucose is above 70 mg/dl.
- 4. If meal or snack NOT scheduled for 30-60 minutes, follow treatment with a snack consisting of carbohydrate and protein such as:
 - crackers and peanut butter or cheese
 - ½ turkey sandwich
 - 1 cup milk and crackers

- 5. If patient unresponsive or unable to swallow and if NO vascular access, call Rapid Response Team (RRT) at 50-0776. Patient to be given supplemental carbohydrates as soon as he/she awakens and is able to swallow. (May take approximately 10 minutes for response following glucagon administration.)
- 6. Please notify Physician/Advanced Practice Clinician (APC) of all above.

SECTION 2: PEDIATRIC PATIENT

(18 years of age or younger) Blood Glucose below 80 mg/dl

- 1. If patient able to swallow, administer 4 ounces fruit juice and recheck Accu-Chek blood glucose in 15 minutes. If blood glucose remains below 80 mg/dl, repeat intervention and continue until blood glucose above 80 mg/dl.
- 2. Notify endocrinologist/Physician/APC for ALL blood glucose readings below 80 mg/dl.
- 3. If patient unresponsive or unable to swallow, MUST obtain order for intravenous 50% Dextrose. Call Pediatric Rapid Response team 50-1045 for added support as needed.

SECTION 3: NEWBORN (0-15) DAYS AND NICU INFANTS

- 1. Refer to PCS Policy <u>PC-TVH-17.58</u> *Care of the Full Term Newborn.*
- 2. Refer to PCS Policy <u>PC-TVH-17.64</u> Care of the Infant Outside of the NICU with a Gestational Less than 38 Completed Weeks.
- 3. Refer to NICU Blood Glucose Protocol, found linked in electronic medical record intervention.

SECTION 4: CRITICAL VALUES

Expected Normal Blood Glucose Reference Range: 74 – 106 mg/dL

Critical Values Handling:

- 1. Adult and Pediatric: less than 50 mg/dl or greater than 400 mg/dl,
- 2. Newborn (0-15 days) and NICU: less than 45 mg/dl or greater than 400 mg/dl.
- 3. If result value is critical you MUST enter a notification comment(s). (Refer to Patient Care Services Point of Care policy PC-TVH-13.03 *Whole Blood Glucose*.)
- 4. Initial results that appear on the meter as LO (<10 mg/dL) or HI (>600 mg/dL) require repeat testing and verification by the main laboratory. Subsequent results exceeding the upper limits of the meter do not require verification if consistent with previous patient results and clinical history. Any additional verification orders will be placed at the discretion of the Physician/Advanced Practice Clinician (APC).
- 5. Repeat testing is required of critical results on the glucose meter. If repeat confirms critical result, notify Physician/APC. The attending Physician/APC will determine on a case by case basis if additional diagnostic laboratory tests are warranted. If Physician/APC requests laboratory confirmation, order a STAT glucose test to be performed by the main laboratory.

SECTION 5: PATIENTS WITH INSULIN PUMP

Refer to PCS Policy #44.61, *Insulin Pump* and follow hypoglycemia directives.

SECTION 6: PREGNANT AND POST PARTUM PATIENTS

Refer to PCS Policy <u>PC-TVH-17.31</u>, Care of the Pregnant Woman with Pregestational and Gestational Diabetes, for blood glucose parameters, intervention and follow up assessment intervals.

SECTION 7: DOCUMENTATION

1. All documentation to be done in the Electronic Medical Record (EMR).

RESPONSIBILITY:

It is the responsibility of nursing leadership or management member, as appropriate to implement, maintain, evaluate, review and revise this policy.

APPROVED DATE:

West 2 Practice Education Committee, August, 2011.

Jack Tohme, MD, July 21, 2011.

Adam Kelman, MD, July 20,2011.

Women and Children's Services, April 2, 2012.

Medical Surgical Services, April 4, 2012.

Heart and Vascular Institute, April 16, 2012.

Nurse Practice Education Council, July 13, 2012.

Nurse Practice Council, July 10, 2015, July 5, 2017, September 2, 2020, September 6, 2023

Bonnie Weinberg, RN

Chairperson, Nurse Practice Council

Donnie Wellberg

Charles Vannoy, RN

VP & Chief Nursing Officer, Patient Care Services

REVIEWED/REVISED DATE:

June 2015

Diabetes Practice Education Committee, June 2017, June 30, 2020

Adam Kelman, MD, Chief of Endocrinology, July 1, 2020, May 5, 2023

Medical Surgical Services, July 15, 2020, June 7, 2023

Women & Children's Services, July 15, 2020, June 1, 2023

Heart/Vascular Institute, July 15, 2020, June 1, 2023

Nurse Practice Council, September 6, 2023

REFERENCES:

American Diabetes Association. "15. Diabetes Care in the Hospital: Standards of Medical Care in Diabetes-2023." *Diabetes Care*, American Diabetes Association, 1 Jan. 2023, https://doi.org/10.2337/dc23-S016

Centers for Disease Control and Prevention. "Low Blood Sugar (Hypoglycemia). *Centers for Disease Control and Prevention*, 30 December, 2022.

https://www.cdc.gov/diabetes/basics/low-blood-sugar.html

Hypoglycemia (cont'd)	PC-TVH-6.16
Forsyth NURSE Scale© Level 1	
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