POLICY & PROCEDURE 25.8.1.34



LAST REVISION MADE ON: 12/18/24
LAST COMPLETE REVIEW: 01/18/24
PAGE: 1 of 3
ATTACHMENT(S): A

TITLE: Hyperglycemia, Management in the Peri-procedural Setting

POLICY: Patients scheduled for elective inpatient surgery or a procedure involving an implant will be

screened for diabetes before surgery is scheduled.

Diabetic patients presenting for surgery and endoscopy procedures will have their blood sugar

assessed and treated as indicated.

EXCLUSIONS: Cataract surgery patients, C-Section patients

PURPOSE: To provide guidelines on the management of hyperglycemia in surgical and endoscopy patients.

RESPONSIBILITY/ SCOPE: Registered Nurses in the Surgical Services and Endoscopy departments. This policy excludes C-section patients performed under general anesthesia.

BACKGROUND INFORMATION:

"Optimal glycemic control has been shown to improve morbidity and mortality in surgical and intensive care patients. Benefits of glucose control include improved wound healing, decreased episodes of infections, and shortened length of stay" (Power, 372).

PROCEDURE: Pre-scheduling

A. Patients requiring elective surgery at HH that will have an inpatient stay or receive an implant will be screened for diabetes before the surgery is booked according to the Preoperative Glucose/Hemoglobin A1C Decision algorithm (Attachment A).

Preadmission Testing

- A. All patients will be asked if they have a history of diabetes and what type (I or II).
- B. Response will be documented in the EHR. The nurse will also document the treatment of diabetes the patient reported (Insulin controlled, Oral Medication controlled, or diet controlled.).
- C. Instructions given to patients on pre-procedure management of their diabetes will follow the Nursing Care of Patients, Process and Documentation PAT (25.8.6.8) and Nursing Care of Patients, Process and Documentation SC (25.8.10.2).

Pre-Procedure

- A. All patients who are identified as diabetic will have their blood sugar tested prior to their procedure.
- B. Blood sugar values that are greater than 180mg/dL will be reported to the appropriate anesthesia provider for follow up and management. Values greater than 180mg/dL should be either treated with insulin and/or re-checked within 90 minutes.
- C. If ordered, blood sugar will be treated per the ANES power plan, hyperglycemia sub-phase in the EHR. Check the sub-phase within the preop phase, check the order for the insulin and give according to the insulin order details.
- D. Decisions for treatment or canceling of surgery/procedure will be up to the appropriate anesthesia provider in consultation with the surgeon or endoscopist.

Intra-Procedure

A. Intra-Procedural management of the diabetic patient will be at the discretion of the anesthesia provider. Blood sugar levels should be re-checked within 90 minutes of pre-op blood sugar.

Disclaimer Message: This policy/procedure is intended to provide guidance only. It does not establish the medical standard of care, nor does it substitute for the me

Date/Time Generated: Jul 01, 2025 11:04 Generated By:

POLICY & PROCEDURE 25.8.1.34



LAST REVISION MADE ON:12/18/24LAST COMPLETE REVIEW:01/18/24PAGE:2 of 3ATTACHMENT(S):A

Post-Procedure

Phase I Recovery

- A. Glucoscan will be performed on all insulin dependent diabetics regardless of pre-op value. Oral or diet-controlled diabetics will receive a glucoscan if their pre-op value was greater than 180mg/dL.
- B. Elevated blood sugars in Phase I recovery will be treated according to the ANES power plan, hyperglycemia sub-phase within the EHR. Check the sub-phase within the PACU phase, check the order for the insulin and give according to the insulin order details.

Phase II Recovery

- A. Patients with blood sugars greater than 180mg/dL pre-procedure will have a repeat blood sugar post-procedure if not checked in Phase I or if continued monitoring required.
- B. Blood sugar values that are greater than 180mg/dL will be reported to the appropriate anesthesia provider for follow up and management.
- C. Outpatients that have elevated blood sugars will be provided with their blood sugar values and encouraged to follow up with primary care physician for ongoing management of blood sugar levels.

REFERENCES:

- Ead, H. (2009) Glycemic Control and Surgery Optimizing Outcomes for patients with Diabetes. *Journal of PeriAnesthesia Nursing*, 24(6), 384-395.
- Kittleson, K.A. (2009). Glycemic Control: A Literature Review with implications for perioperative nursing. *Association of periOperative Registered Nurses Journal*, 90(5), 714-730.
- Lipshutz, A. K., Gropper, M. A. (Feb 2009) Perioperative Glycemic Control. *Anesthesiology*. Vol 110:2, 408-421
- Power, M, Ostrow, C.L (2008). Perioperative Diabetes management Protocol for Adult Outpatients. *Journal of PeriAnesthesia Nursing*, 23(6), 371-378.
- Smith, D.K. (2009). A Study of Perioperative Hyperglycemia in patients with diabetes having colon, spine, and joint surgery. *Journal of PeriAnesthesia Nursing*, 24(6), 362-369.

AUTHORS: Nurse Educator, PAT, Pre & Post/PACU

REVIEWED BY: Clinical Manager, PAT/ SPR

Clinical Manager, Surgery Center

Clinical Manager, Surgery Medical Director, Anesthesia

Professional Development Educator, Surgical Services

Clinical Manager, Endoscopy Family Medicine (Dr. Lindberg)

APPROVED BY: Director, Surgical Services

Disclaimer Message: This policy/procedure is intended to provide guidance only. It does not establish the medical standard of care, nor does it substitute for the me

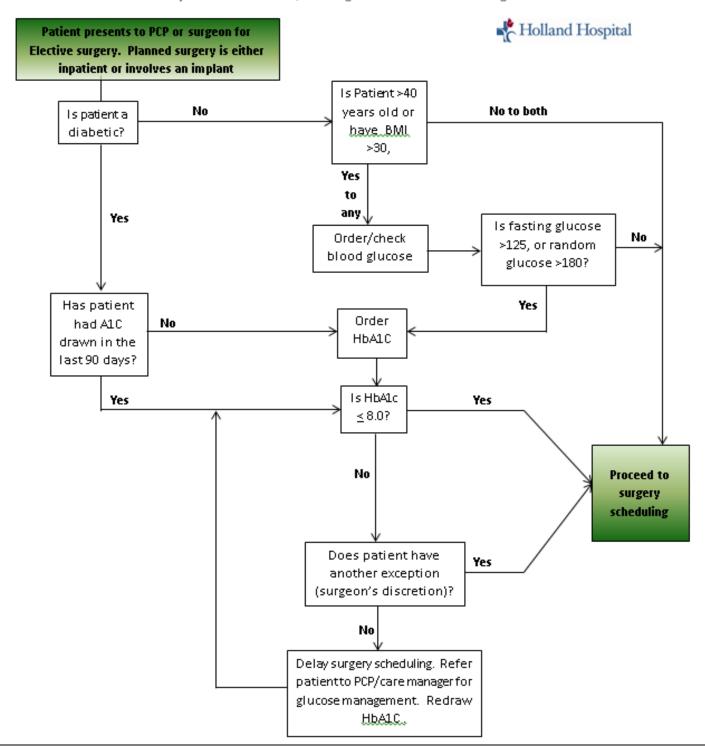
Date/Time Generated: Jul 01, 2025 11:04 Generated By:



LAST REVISION MADE ON: 12/18/24 LAST COMPLETE REVIEW: 01/18/24 PAGE: 3 of 3 ATTACHMENT(S): A

Pre-operative Glucose/Hemoglobin A1C Decision Algorithm

Pre-operative Glucose/Hemoglobin A1C Decision Algorithm



Disclaimer Message: This policy/procedure is intended to provide guidance only. It does not establish the medical standard of care, nor does it substitute for the medical judgment of the provider.

Date/Time Generated: Jul 01, 2025 11:04

Generated By: