Interior Health

DIABETES – Gestational & Pre-Gestational Type 2
Management of Intrapartum and Postpartum

Weight (kg)

Bulleted orders are initiated by default, unless crossed out and initialed by the physician/prescriber. Boxed orders (☐) require physician/prescriber check mark (☑) to be initiated.

1. ALLERGIES: SEE ALLERGY/ADR RECORD

A. INTRAPARTUM MANAGEMENT

2. ADMISSION INSTRUCTIONS

- DO NOT USE THIS PPO FOR TYPE 1 DIABETES (USE PPO #829384)
- Obtain Diabetes Education Centre report & plan for delivery, from antenatal file or Meditech patient care/reports online.
- PPO criteria for use: diet controlled and insulin treated gestational diabetes mellitus or Type 2 diabetes mellitus patients

3. CONSULTS

- MRP _____
- ☐ Consult Obstetrician
- ☐ Notify physician managing diabetes (if different than MRP): Dr. _____
- If no in-hospital expertise available, consider paging endocrinologist on call at BCW&C hospital 1-604-875-2161

4. DIET

☐ NPO ☐ Clear Fluids ☐ Gestational Diabetic Diet

5. MONITORING

Target Capillary Blood Glucose (CBG) = 4 to 7 mmol/L*

**Correction of blood glucose may occur below 7 mmol/L due to delayed response to insulin (see section 7)*

- Measure CBG on admission and every 2 hours
- Measure CBG hourly if patient is started on insulin *(see section 7)*
- Nurse to use Accu-Chek® Inform II meter to measure CBG. If patient self-monitoring, nurse to do supplemental CBG checks using IH Accu-Chek® Inform II meter QID (AC meals and at bedtime - see reverse)
- Record CBG levels on BC Perinatal Triage & Assessment Record or on BC Labour Partogram

6. LABORATORY

☐ Patient to use personal blood glucose meter to self monitor blood glucose (see reverse)

- Patient blood glucose meter check (GLUMCHEK)
  (Patient meter must be within 20% of lab value or patient monitor cannot be used in hospital)

☐ _____

☐ _____

7. INTRAVENOUS THERAPY AND HYDRATION

☐ Initiate IV 0.9% sodium chloride as primary line at _____ mL/H via infusion pump

☐ Saline Lock

If capillary blood glucose (CBG) is less than 4 mmol/L and the patient is NPO:

- Add additional IV line of D10W at 50 mL/H attached to primary line at lower port and infuse via infusion pump
- Titrate 0.9% sodium chloride to 100 mL/H for a total IV rate of 150 mL/H

Date (dd/mm/yyyy)	Time	Prescriber's Signature	Printed Name or College ID#
/ /			

GUIDELINES FOR DECISION MAKING

Identify Type of Diabetes

- Pre-gestational is diabetes that has onset prior to pregnancy (Type 1 or Type 2). Pre-gestational diabetes Type 1 is ketotic prone and always requires insulin. Gestational Diabetes Mellitus (GDM) and Type 2 may not require insulin during labour. Patient may self-identify type of diabetes or type may be found on last visit to Diabetes Education Centre (refer to Meditech Patient Care / Reports). Between 34 to 36 weeks, if the patient has attended the Diabetes Education Centre, there should be a plan for labour & delivery found in the Meditech Patient Care or Reports menu.

Consults for glucose control

- Generally, GDM may be managed by the primary care practitioner (PCP). May consider Obstetrician consult. If patient has pre-gestational Type 2 diabetes or GDM on insulin, and no in hospital specialist is identified in the pre-delivery plan, a consult may be obtained from BCW&C endocrinologist on call 24 hours / day (1-604-875-2161).

Diet

- Clear fluids are not contraindicated unless maternal or fetal concerns. If concerns identified notify Anesthetist or Obstetrician prior to initiating oral fluids. Hypoglycemia may be treated with juice if not NPO.

Blood glucose levels

- Blood glucose level between 4 to 7 mmol / L are the ideal targets during labour; these levels are associated with less neonatal hypoglycemia.
- If the patient wishes to use her own blood glucose meter, the accuracy of her home glucose meter must be checked (prior to being used for monitoring). Order patient blood glucose meter check (GLUMCHEK) from lab. Patient meter must be within 20% of lab value to be used in hospital. The accuracy percent will be printed on the lab report. In addition to the patient self monitoring, the RN is required to do supplemental CBG testing using IH Accu-Chek® Inform II meter to support lab requirements. Recommend typically 4 times within 24 hour period (before meals and at bedtime).

Intravenous Fluids

- 0.9% sodium chloride is the maintenance fluid of choice for managing diabetes patients.
- If hypotensive from regional anesthesia or hemorrhaging is present, the fluid choice may be determined by Anesthesia or Obstetrical services. Blood Glucose may rise due to dehydration.
- A source of IV dextrose may be necessary to prevent ketosis.

Insulin

- If NPO or on clear fluids and in active labour, even women on large amounts of insulin antepartum often do not require insulin in labour.
- If blood sugars are outside the target range, starting subcutaneous insulin per scale may be adequate to control glucose. This scale is a starting point and patients may require higher doses.
- Stop insulin at the time of delivery as postpartum patients may be highly sensitive to insulin.

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8. INSULIN

- Discontinue previous subcutaneous insulin orders.
- If Capillary Blood Glucose (CBG) is less than 4 mmol/L or greater than 6 mmol/L, start on subcutaneous sliding scale insulin orders (as indicated in the chart below) and notify prescriber. Measure CBG hourly.
- Notify prescriber if CBG is less than 4 mmol/L or greater than 6 mmol/L on 2 consecutive readings. If patient is started on subcutaneous sliding scale insulin, measure CBG hourly.
- If CBG has fallen by 2 mmol/L or greater with a sliding scale dose of aspart (Novorapid®), wait an additional hour, recheck CBG, then assess need for subsequent dose (as indicated in the chart below)

Subcutaneous Sliding Scale Insulin Orders	
Capillary Blood Glucose in mmol/L	**Units of insulin aspart (NovoRapid®) subcutaneously (SC)**
Less than 4	Follow hypoglycemia protocol (IH #829518) and consider IV of D10W at 50 mL/H
4 to 6	none
6.1 to 7	2 units SC
7.1 to 8	3 units SC
8.1 to 9	4 units SC
9.1 to 10	5 units SC
Greater than 10	Call prescriber and consider IV insulin See Type 1 Diabetes Orders #829384 – Option 3

B. POSTPARTUM MANAGEMENT

- Discontinue all previous insulin orders
- Gestational Diabetic Diet as tolerated
- Record CBG on the IH Subcutaneous Insulin Administration and Blood Glucose Record – Adult Eating/Bolus Enteral Feeds.

☐ **If gestational diabetes:**

- CBG before breakfast and before dinner postpartum day 1
- If CBG less than 7 mmol/L, discontinue CBG monitoring
- If CBG greater than 7 mmol/L, follow Type 2 diabetes orders below

☐ **If Type 2 diabetes:**

- CBG 1 hour postpartum, then before meals and at bedtime
- If CBG is 7 to 9.9 mmol/L, continue to monitor CBG before meals and at bedtime and contact prescriber (non-urgently – next day if after hours) for orders. Record CBG on the IH Subcutaneous Insulin Administration and Blood Glucose Record – Adult Eating/Bolus Enteral Feeds.
- If CBG greater than 10 mmol/L, contact prescriber for orders
- For patients who require insulin for elevated CBG postpartum, make an appointment at the Diabetes clinic for follow up within a month of discharge

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