

NCLEX-RN • LABOR & DELIVERY • DAY 9 OF 16

Gestational Diabetes, Glucose Monitoring, Macrosomia & Newborn Hypoglycemia

Advanced application-level review built on the 2026 NCLEX-RN Test Plan and the NGN Clinical Judgment Measurement Model. Every section trains you to ask one question: *"What finding is most dangerous for the mother or fetus, and what should the nurse do first?"*

Clinical Judgment Model • 6 cognitive steps

Safety & Infection Control

Pharmacological Therapies

Reduction of Risk Potential

Health Promotion & Maintenance

WHAT'S INSIDE

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SECTION 01

High-Yield Overview

Gestational diabetes mellitus (GDM) is glucose intolerance first recognized in pregnancy, driven by placental hormones (human placental lactogen, cortisol, estrogen, progesterone) that cause **insulin resistance**. The placenta is the engine — once it delivers, insulin needs drop dramatically. That single fact governs labor management **and** immediate postpartum care.

Glucose crosses the placenta freely; **insulin does not**. So a hyperglycemic mother creates a fetus with chronic hyperinsulinemia. The fetus grows large (macrosomia), uses extra oxygen (fetal hypoxia risk), and after the cord is clamped continues to produce insulin while the maternal glucose supply abruptly stops — the textbook recipe for **neonatal hypoglycemia** in the first 1–2 hours of life.

The Day 9 mental model: Maternal glucose during labor is a fetal oxygen issue. Tight maternal control = a calmer fetus and a safer newborn transition. After delivery, glucose flips: **maternal insulin needs plummet**, while the **newborn**

must be screened and fed.

Key labor & birth risks driven by GDM

- **Macrosomia** ($\geq 4,000$ g, often defined $\geq 4,500$ g in diabetic pregnancies) → shoulder dystocia, clavicle fracture, brachial plexus injury (Erb's palsy), operative birth, PPH from uterine overdistension.
- **Polyhydramnios** → cord prolapse risk with rupture of membranes, preterm labor, uterine atony.
- **Fetal hypoxia & stillbirth risk** with poor maternal glucose control → Category II/III tracings, late decelerations.
- **Neonatal hypoglycemia, hypocalcemia, polycythemia, hyperbilirubinemia, respiratory distress syndrome** (surfactant maturation is delayed in infants of diabetic mothers).
- **Maternal:** preeclampsia, DKA (especially type 1), infection, cesarean birth, future type 2 diabetes.

Target numbers you must own cold

- **Maternal glucose during labor:** typically **70–110 mg/dL** (some protocols 70–120). Check every **1–2 hours**.
- **Newborn glucose threshold for intervention (AAP):** **<40 mg/dL** after the first 4 hours; **<25 mg/dL** in the first 4 hours.
- **Macrosomia:** **$\geq 4,000$ g** (8 lb 13 oz); cesarean recommended when EFW **$\geq 4,500$ g** with diabetes ($\geq 5,000$ g without).
- **Postpartum maternal insulin needs:** drop by roughly **50%** immediately after placental delivery — hold scheduled insulin and recheck glucose.
- **2-hour postprandial home goal (antepartum GDM):** **<120 mg/dL**; fasting **<95 mg/dL**.

SECTION 02

10 Must-Know NCLEX Rules

01 Hyperglycemia in labor is a fetal oxygen problem.
High maternal glucose → fetal hyperinsulinemia → increased fetal O_2 demand → late decelerations and acidosis. Tight control protects the tracing.

02 Avoid dextrose-containing IV fluids in the laboring GDM client unless ordered for hypoglycemia. Lactated Ringer's or 0.9% NS is the default. Dextrose IV crosses the placenta and spikes fetal insulin.

03 Check maternal glucose every 1–2 hours in active labor. Insulin infusion is titrated to keep glucose **70–110 mg/dL**.

04 After rupture of membranes in a GDM client, immediately assess the fetal heart rate.
Polyhydramnios + a large fetus that is not engaged = cord prolapse risk.

05 Suspect shoulder dystocia at the "turtle sign" — the head retracts against the perineum after delivery. **McRoberts maneuver** (hyperflex maternal thighs to abdomen) + **suprapubic pressure** are first-line. **Never apply fundal pressure.**

06 Hold scheduled insulin and basal infusions immediately after placental delivery; recheck glucose. The placenta drove the insulin resistance — it's gone.

07 Newborn hypoglycemia is often silent. Screen any LGA, infant of a diabetic mother, SGA, late preterm, or symptomatic newborn at **30 min–1 hour** of life. Symptoms: jitteriness, hypotonia, poor feeding, weak cry, apnea, hypothermia, seizures.

08 Treat newborn hypoglycemia with feeding first (breast or formula 5–10 mL/kg) when the infant can feed safely and glucose is not critically low. Recheck in **30 minutes.** IV dextrose (D10W bolus 2 mL/kg) for severe or symptomatic hypoglycemia or inability to feed.

09 Skin-to-skin contact is a nursing intervention, not just a "nice to have." It stabilizes glucose, temperature, breathing, and supports early breastfeeding — critical for the infant of a diabetic mother.

10 The GDM mother is at high risk for postpartum hemorrhage. An overdistended uterus (macrosomia, polyhydramnios) doesn't contract well. Assess the fundus and lochia obsessively in the fourth stage.

SECTION 03

Maternal–Fetal Safety Table

FINDING	WHAT IT MEANS	MOTHER RISK	FETAL/NEWBORN RISK	PRIORITY NURSING ACTION	NOTIFY / ESCALATE
Maternal glucose 180 mg/dL in labor	Hyperglycemia despite labor stress; insulin under-titrated	DKA risk (type 1), infection, dehydration	Fetal hyperinsulinemia, hypoxia, late decels, postnatal hypoglycemia	Recheck glucose, increase insulin infusion per protocol, continuous EFM, IV fluids without dextrose	Notify provider for insulin titration order
Maternal glucose 55 mg/dL in labor	Hypoglycemia (often from over-titration or NPO + labor energy use)	Altered LOC, seizures, fall, fetal compromise	Fetal hypoglycemia, decreased variability	Stop insulin infusion, give D5LR or per protocol, recheck in 15 min, continuous EFM	Notify provider; document response
SROM with large fetus, high station	Cord prolapse risk (polyhydramnios + unengaged head)	Emergency cesarean if cord prolapsed	Cord compression, severe fetal bradycardia, hypoxic injury	Immediate FHR assessment, sterile vaginal exam if cord suspected, knee-chest or Trendelenburg, manual elevation of presenting part	STAT call to provider & OR; prepare for emergency cesarean
Turtle sign after delivery	Shoulder dystocia — anterior	Hemorrhage, perineal	Brachial plexus injury, clavicle	Call for help, start clock, McRoberts	Activate OB emergency team;

FINDING	WHAT IT MEANS	MOTHER RISK	FETAL/NEWBORN RISK	PRIORITY NURSING ACTION	NOTIFY / ESCALATE
of head	shoulder impacted	trauma, uterine rupture	fracture, hypoxia, death	maneuver + suprapubic pressure, no fundal pressure	alert NICU
Late decelerations + GDM client	Uteroplacental insufficiency in a fetus with high O ₂ demand	Cesarean birth	Fetal acidosis, hypoxic-ischemic injury	Reposition (left lateral), IV bolus per order, stop oxytocin, recheck glucose, O ₂ per policy if indicated	Notify provider; prepare for expedited delivery if Category III
Newborn glucose 32 mg/dL at 1 hour, jittery	Symptomatic neonatal hypoglycemia	—	Seizures, brain injury, apnea	Initiate feeding (breast or formula); if unable to feed or persistent — IV D10W 2 mL/kg per order; recheck in 30 min	Notify provider; transfer to higher level of care if persistent
Fundus boggy 30 min postpartum after birth of 4,500 g infant	Uterine atony from overdistension	Postpartum hemorrhage, shock	—	Fundal massage, empty bladder, increase IV oxytocin per order, assess lochia and VS	If not firming → notify provider; prepare methylergonovine, carboprost, or tranexamic acid per order
Newborn respiratory distress + grunting, IDM	Delayed surfactant maturation, transient tachypnea, or RDS	—	Respiratory failure, hypoxia	Position, suction PRN, monitor SpO ₂ , thermoregulate, keep NPO if severe distress	Notify provider; NICU consult

SECTION 04

Red-Flag Cues — What Triggers What

Immediate assessment — any glucose <70 or >140 mg/dL in labor; any change in FHR baseline or variability; SROM with high station fetus; maternal headache, vision changes, or chest pain in a preeclamptic GDM client; newborn jitteriness, poor tone, or weak cry.

Repositioning — late decelerations, prolonged decelerations, or fetal bradycardia → **left lateral first**, then right lateral, then knee-chest if cord suspected. For suspected cord prolapse, **knee-chest or Trendelenburg with manual elevation of the presenting part** until cesarean.

IV fluid bolus (per order, when appropriate) — maternal hypotension after epidural, late decelerations, or Category II tracing. Use **lactated Ringer's or 0.9% NS — not D5**—for the GDM client unless treating documented hypoglycemia.

Stop oxytocin — tachysystole (>5 contractions/10 min averaged over 30 min), uterine resting tone >20 mmHg with IUPC, recurrent late or prolonged decelerations, Category III tracing, or suspected uterine rupture. The GDM client with macrosomia is at particularly high risk for tachysystole-related fetal compromise.

Oxygen — only when clinically indicated per policy/fetal status. Current evidence does not support routine maternal O₂ for Category II tracings in the absence of maternal hypoxemia. Follow facility policy — typically 10 L/min non-rebreather when O₂ is indicated.

Provider notification — glucose outside 70–110 mg/dL, EFW ≥4,500 g, abnormal labor progress, polyhydramnios, Category II that does not resolve with intrauterine resuscitation, newborn glucose below threshold after one feed.

Rapid response / emergency birth preparation — cord prolapse, shoulder dystocia, Category III tracing, eclamptic seizure, suspected uterine rupture, maternal DKA with non-reassuring FHR, postpartum hemorrhage unresponsive to first-line uterotonics.

SECTION 05

Medication Safety

MEDICATION	WHY GIVEN	ASSESS BEFORE	MOST DANGEROUS AE	HOLD / NOTIFY	ANTIDOTE / MONITORING
Regular insulin (IV infusion)	Maintain maternal glucose 70–110 in labor	Baseline glucose, K+, IV patency, current insulin, last PO intake	Hypoglycemia, hypokalemia	Hold & notify if glucose <70; titrate per protocol	Antidote: D5 IV (or D10) for severe hypoglycemia Hourly glucose, hourly I&O

MEDICATION	WHY GIVEN	ASSESS BEFORE	MOST DANGEROUS AE	HOLD / NOTIFY	ANTIDOTE / MONITORING
Lactated Ringer's / 0.9% NS	Maintenance & bolus fluid in laboring GDM client	Glucose trend, BP, FHR	Fluid overload	Hold dextrose-containing fluids unless ordered for hypoglycemia	Monitor I&O, lung sounds
Oxytocin (Pitocin)	Induction/augmentation; postpartum uterotonic	FHR, contraction pattern, cervical status, Bishop score; fundus & bleeding postpartum	Tachysystole, uterine rupture, water intoxication (long high-dose use), fetal distress	Stop immediately for tachysystole, Category III, suspected rupture	Monitoring: continuous EFM, IUPC if available, q15 min VS during titration. Antidote: discontinue + terbutaline if tachysystole with non-reassuring FHR
Terbutaline	Acute tocolytic for tachysystole with non-reassuring FHR (not for routine PTL)	Maternal HR, lung sounds, glucose, K+	Maternal tachycardia, pulmonary edema, hyperglycemia, hypokalemia	Hold if maternal HR >120 bpm; not given in significant cardiac disease	Monitor HR, BP, glucose, K+; worsens hyperglycemia — recheck maternal glucose
Methylergonovine (Methergine)	Postpartum uterotonic (2nd-line)	BP — contraindicated in hypertension/preeclampsia	Severe hypertension, stroke, MI	Hold if BP >140/90 or any HTN disorder	Monitor BP q15 min × 1 hr; IM only (not IV)
Carboprost (Hemabate)	PPH 3rd-line uterotonic	Asthma history — contraindicated	Bronchospasm, severe diarrhea, fever	Hold in asthma	Pre-medicate for diarrhea (e.g., loperamide per order); monitor SpO ₂ , lung sounds
Tranexamic acid (TXA)	Adjunct for PPH within 3 hours of birth	VTE history, renal function	Thrombosis, seizures (high dose)	Caution with active VTE	1 g IV over 10 min; monitor VS, bleeding

MEDICATION	WHY GIVEN	ASSESS BEFORE	MOST DANGEROUS AE	HOLD / NOTIFY	ANTIDOTE / MONITORING
Dextrose 10% (D10W) — newborn	Severe or symptomatic neonatal hypoglycemia, or inability to feed	POC glucose, IV access, weight	Rebound hypoglycemia if stopped abruptly; extravasation	Bolus 2 mL/kg, then continuous infusion per provider	Recheck glucose 30 min after intervention; monitor IV site
Dextrose gel 40% (oral, buccal)	Asymptomatic newborn hypoglycemia adjunct alongside feeding	Newborn able to maintain airway, no severe distress	Aspiration if administered incorrectly	Hold if newborn cannot safely tolerate buccal administration	Massage gel into buccal mucosa, follow with feeding; recheck glucose in 30 min

SECTION 06

Fetal Monitoring Focus — GDM & Macrosomia

What the strip tells you about glucose

- **Baseline:** 110–160 bpm. **Tachycardia** (>160 for ≥10 min) is suspicious for fetal hyperinsulinemia, maternal hyperglycemia, chorioamnionitis, dehydration, or terbutaline effect.
- **Variability:** moderate (6–25 bpm) = a well-oxygenated fetal CNS. **Minimal/absent** variability in a GDM client raises the alarm for hypoxia or acidosis.
- **Accelerations:** reassuring; their *absence* with minimal variability is more concerning than late decelerations alone.
- **Early decelerations:** head compression — usually benign.
- **Variable decelerations:** cord compression — common with polyhydramnios + macrosomia + ROM. **Reposition first.**
- **Late decelerations:** uteroplacental insufficiency — the GDM signature. **Stop oxytocin, reposition, IV bolus, O₂ per policy, notify provider.**
- **Prolonged decelerations** (>2 min, <10 min): treat as Category II at minimum; if recurrent or with absent variability → Category III.

Category interpretation in one breath

- **Category I:** normal — continue routine monitoring.
- **Category II:** indeterminate — most strips live here. Apply **intrauterine resuscitation**: reposition, stop oxytocin, IV bolus, correct hypotension, O₂ per policy when indicated, notify provider, reassess.
- **Category III:** abnormal — absent variability with recurrent late/variables, recurrent prolonged decelerations, or sinusoidal pattern. **Prepare for expedited delivery.**

Contraction pattern in the GDM/macrosomia client

- **Tachysystole:** >5 contractions/10 min averaged over 30 min. Common with oxytocin; the macrosomic uterus tolerates it poorly. **Stop oxytocin, reposition, IV bolus; consider terbutaline if non-reassuring FHR.**
- **Inadequate contractions / arrest of descent:** the macrosomic fetus may simply not fit — re-evaluate for cesarean rather than push more oxytocin.
- **Resting tone >20 mmHg** (with IUPC) suggests tachysystole, abruption, or rupture — re-examine context.

SECTION 07

10 NGN Practice Questions

Q1 MULTIPLE CHOICE • TAKE ACTION

A nurse is caring for a client at 39 weeks' gestation with GDM in active labor. The point-of-care glucose is 178 mg/dL. The fetal heart tracing shows a baseline of 165 bpm with minimal variability and two late decelerations in the last 20 minutes. Oxytocin is infusing at 12 milliunits/min. Which action should the nurse take **first**?

- A. Increase the oxytocin infusion to improve labor progress.
- B. Stop the oxytocin infusion and reposition the client to the left side.
- C. Administer 10 units of regular insulin subcutaneously.
- D. Administer 1,000 mL of D5LR bolus.

ANSWER • B

CJ • Take Action

Why B is correct: Late decelerations + minimal variability = Category II uteroplacental insufficiency in a GDM client whose fetus already has high oxygen demand. First-line intrauterine resuscitation is to **stop oxytocin and reposition**. Then IV fluid bolus (LR or NS), notify provider, and check glucose.

A wrong: Increasing oxytocin worsens the tracing.

C wrong: SubQ insulin in active labor is too slow and not first-line; insulin is given IV and only after addressing the tracing.

D wrong: Fluid bolus is appropriate but the IV must **not contain dextrose** in a hyperglycemic GDM client.

Trap tested: Confusing the "give fluids" reflex with route specifics; forgetting that *stopping oxytocin* is part of intrauterine resuscitation.

Q2 SATA • ANALYZE CUES

A newborn weighing 4,420 g was born vaginally to a mother with GDM 45 minutes ago. Which findings require **immediate** nursing action? *Select all that apply.*

- A. Glucose 32 mg/dL.
- B. Jitteriness when undressed.
- C. Axillary temperature 36.9°C (98.4°F).
- D. Asymmetric Moro reflex with limp left arm.
- E. Acrocyanosis at 1 hour of life.
- F. Respiratory rate 78 with grunting and nasal flaring.

ANSWERS • A, B, D, F

CJ • Analyze Cues

A: Glucose 32 mg/dL is below the AAP threshold (<40 after 4 hr; <25 in first 4 hr) and warrants feeding/recheck.

B: Jitteriness is a classic sign of neonatal hypoglycemia.

D: Asymmetric Moro + limp arm = brachial plexus injury (Erb's palsy), a complication of shoulder dystocia in macrosomic infants. Requires evaluation and care.

F: RR >60 with grunting/flaring = respiratory distress; common in IDMs due to delayed surfactant maturation.

C wrong: 36.9°C is within the normal axillary range (36.5–37.5°C).

E wrong: Acrocyanosis is normal in the first 24 hours.

Trap tested: Recognizing that a "normal-looking" newborn of a diabetic mother is high-risk; spotting silent brachial plexus injury after a macrosomic birth.

Q3 DROP-DOWN / CLOZE • GENERATE SOLUTIONS

Complete the sentence about a laboring GDM client whose point-of-care glucose is 62 mg/dL:

"The nurse anticipates [1] the insulin infusion and administering [2] per protocol. The nurse will recheck the glucose in [3]."

1: increasing / decreasing / stopping

2: 0.9% NS bolus / D5LR or per protocol / regular insulin SQ

3: 4 hours / 1 hour / 15–30 minutes

ANSWERS • stopping • D5LR or per protocol • 15-30 minutes

CJ • Generate Solutions

Maternal glucose <70 mg/dL in labor requires **stopping insulin**, switching to or starting **dextrose-containing fluid per protocol**, and rechecking glucose at **15–30 minutes**. Continuous EFM throughout.

Trap tested: This is the only clinical situation in which dextrose IV is correct in a GDM laboring client.

Q4 ORDERED RESPONSE • TAKE ACTION

During the birth of a 4,520 g infant of a mother with GDM, the head delivers but the shoulders do not advance — turtle sign is noted. Place the nurse's actions in correct order:

- A. Apply suprapubic pressure as directed by provider.
- B. Call for help and start the dystocia clock.
- C. Hyperflex maternal thighs sharply against the abdomen (McRoberts).
- D. Document maneuvers and timing.
- E. Alert the neonatal team and prepare resuscitation equipment.

ORDER • B → E → C → A → D

CJ • Take Action

- 1) **B — Call for help/start the clock.** Shoulder dystocia is a team event; documentation of time is critical.
- 2) **E — Alert neonatal team.** Resuscitation is likely; this should happen with the call for help.
- 3) **C — McRoberts maneuver** is the first-line maneuver; success rate is high.
- 4) **A — Suprapubic pressure** is added if McRoberts alone is insufficient (NEVER fundal).
- 5) **D — Document** every maneuver and time as you go and after.

Trap tested: Choosing "apply fundal pressure" — that is contraindicated and worsens impaction. Also choosing to document *during* active rescue rather than after.

Q5 MATRIX • ANALYZE CUES

For each finding in a newborn of a mother with GDM at 1 hour of life, indicate whether it is **EXPECTED** or **REQUIRES INTERVENTION**.

Glucose 38 mg/dL, infant feeding well

Glucose 22 mg/dL

Hematocrit 68%

Temperature 36.7°C axillary

Plethoric/ruddy appearance

Tremors that stop when held

Bilateral grunting respirations

MATRIX

CJ · Analyze Cues

- **Glucose 38 mg/dL, feeding well → REQUIRES INTERVENTION** (below the 40 mg/dL threshold; feed + recheck).
- **Glucose 22 mg/dL → REQUIRES INTERVENTION** (critical; IV D10W likely).
- **Hct 68% → REQUIRES INTERVENTION** (polycythemia >65% — common in IDMs; risk of hyperviscosity, jaundice).
- **Temperature 36.7°C → EXPECTED** (normal axillary range 36.5–37.5).
- **Plethoric/ruddy → EXPECTED finding but warrants Hct check** — for NCLEX matrix purposes, this is a red flag of polycythemia in an IDM and **requires intervention** (assess Hct).
- **Tremors that stop when held → EXPECTED** (jitteriness that *stops* with containment is more likely benign than hypoglycemia; check glucose if any doubt).
- **Bilateral grunting → REQUIRES INTERVENTION** (respiratory distress).

Trap tested: Confusing benign jitteriness (stops with containment) vs. true neurological tremor; treating "feeding well" as protective when the number itself is still abnormal.

Q6 BOW-TIE · PRIORITIZE HYPOTHESES + TAKE ACTION

A G3P2 client with GDM at 40 weeks' gestation rings the call light at 30 minutes postpartum after delivery of a 4,610 g infant. She reports feeling "wet and lightheaded." Bleeding has saturated the underpad. Fundus is boggy and 2 cm above the umbilicus, deviated to the right. BP 96/54, HR 116.

Identify the **most likely condition**, the **two priority actions**, and the **two parameters to monitor**.

Conditions: *postpartum hemorrhage from uterine atony / vaginal laceration / retained placenta / amniotic fluid embolism*

Actions: *massage fundus / encourage bathroom trip / start methylergonovine IV / empty bladder (straight cath if needed) / give IV fluid bolus / encourage early breastfeeding*

Monitor: *oral temperature / fundal tone & lochia / serial BP & HR / fetal heart rate / oxygen saturation*

CONDITION · PPH from uterine atony

CJ · Prioritize + Take Action

Condition: Boggy fundus + heavy bleeding + macrosomic birth (overdistended uterus) + hypotension/tachycardia = **uterine atony**. Bladder displacement (deviated to the right) is contributing.

Two priority actions:

1. **Massage the fundus** — first-line for atony.

2. **Empty the bladder** (ambulate to void; if unable, straight catheterize) — a full bladder mechanically prevents the uterus from contracting.

Two parameters to monitor: fundal tone & lochia, and serial BP & HR.

Why not methylergonovine IV: Methergine is **IM only**, and is contraindicated in hypertension; her BP is currently low, but more importantly the route in this option is wrong. IV oxytocin titration is the first uterotonic.

Trap tested: Forgetting the bladder. NCLEX loves bladder distention as a "hidden" cause of atony.

Q7 MULTIPLE CHOICE • EVALUATE OUTCOMES

A newborn of a diabetic mother had a glucose of 30 mg/dL at 30 minutes of life. The infant was breastfed and rechecked 30 minutes later. Which result indicates the **intervention was effective**?

A. Glucose 38 mg/dL; infant alert and feeding.

B. Glucose 47 mg/dL; infant alert and feeding.

C. Glucose 52 mg/dL; infant difficult to arouse.

D. Glucose 41 mg/dL; infant jittery.

ANSWER • B

CJ • Evaluate Outcomes

B is correct — glucose has risen above the 40 mg/dL threshold and the infant is clinically reassuring. Continue feeding routine and recheck per protocol.

A wrong: 38 mg/dL is still below threshold; intervention not yet effective.

C wrong: Glucose is acceptable but the infant's altered LOC is a red flag — could indicate sepsis, hypothermia, or other process.

D wrong: Glucose is at threshold but symptoms persist — keep feeding/treating.

Trap tested: Choosing the highest number without re-evaluating clinical status. NGN demands lab + clinical picture together.

Q8 MEDICATION SAFETY • TAKE ACTION

A nurse is preparing to administer a medication to control postpartum bleeding in a client who just delivered a 4,300 g infant. The client's history includes GDM and gestational hypertension with a current BP of 156/98. Which uterotonic is **contraindicated**?

A. Oxytocin (Pitocin) IV.

B. Methylergonovine (Methergine) IM.

C. Misoprostol (Cytotec) rectal.

D. Tranexamic acid (TXA) IV.

ANSWER • B

CJ • Take Action

B is correct. Methylergonovine causes vasoconstriction and is **contraindicated in hypertension or preeclampsia** — risk of severe HTN, stroke, MI.

A: Oxytocin is first-line and safe here.

C: Misoprostol is acceptable (caution with active CV disease, but not BP-driven).

D: TXA is an adjunct, not contraindicated by BP alone.

Trap tested: Methergine and hypertension is a forever NCLEX favorite. Always read the BP before reaching for it.

Q9 FETAL MONITORING STRIP • ANALYZE CUES

A GDM client at 38 weeks is on an oxytocin induction. The strip shows: baseline 170 bpm, minimal variability, no accelerations, late decelerations with three consecutive contractions, contraction frequency every 1.5 minutes. Maternal glucose 162 mg/dL, BP 124/78. How should the nurse categorize and respond?

A. Category I — continue oxytocin; document.

B. Category II — stop oxytocin, reposition, IV bolus (no dextrose), notify provider, recheck glucose.

C. Category III — call rapid response, prepare for emergency cesarean.

D. Increase oxytocin to accelerate labor.

ANSWER • B (borderline → C if no improvement)

CJ • Analyze Cues

This is a Category II tracing trending toward III: tachycardia + minimal variability + recurrent late decelerations + tachysystole. Hyperglycemia is contributing.

B is correct first response: intrauterine resuscitation — stop oxytocin, reposition, IV bolus (LR/NS, **not D5**), notify provider, recheck glucose, O₂ per policy if indicated. If absent variability persists with lates → Category III, expedited delivery.

A: Not Category I — there are recurrent late decelerations.

C: Not yet Category III — variability is minimal but not absent in this stem, and decels are not yet sustained.

D: Increasing oxytocin worsens the picture.

Trap tested: Jumping to "give O₂" as the first action. Stop oxytocin first; O₂ is policy-dependent and not the lead.

Q10 CASE-STYLE PRIORITIZATION • RECOGNIZE CUES

Four postpartum clients on a maternity unit. Which client should the nurse assess **first**?

A. A G2P2 1 hour postpartum with GDM, fundus firm at U, lochia moderate rubra, BP 118/72, HR 84.

B. A G1P1 30 minutes after a 4,500 g vaginal birth with GDM, fundus boggy at U+2, lochia heavy, BP 100/58, HR 112.

C. A G3P3 2 hours postpartum, breastfeeding, complaining of strong afterpains.

D. A G1P1 4 hours postpartum, blood glucose 88 mg/dL, asking to ambulate to the bathroom.

ANSWER • B

CJ • Recognize Cues

B is correct. All the warning signs of early PPH from uterine atony in an overdistended uterus: boggy fundus above the umbilicus, heavy lochia, falling BP, rising HR. Immediate fundal massage, bladder check, IV access verification, and uterotonic prep.

A, C, D: Routine findings or stable. NCLEX prioritization rule: *unstable beats uncomfortable; bleeding beats sore*.

Trap tested: Letting the GDM "label" in choice A distract you. Stability data drives the answer.

SECTION 08

Unfolding NGN Case Study

Client: Maria, 32 y/o G2P1 • 39 + 2 weeks • GDM (A2 — insulin-controlled)

NURSE'S NOTES — 0800

Client presents in active labor. Contractions every 3 min, 60 sec, moderate. Reports a "gush of fluid" at 0700; clear, no odor. Last meal 0500 (toast + coffee, took half her usual morning insulin). Reports she "feels normal." BMI 34. Prenatal U/S 3 days ago: EFW 4,350 g. GBS positive — receiving penicillin q4h. No allergies.

MATERNAL VITAL SIGNS

BP 128/78 • HR 92 • RR 18 • Temp 37.0°C • SpO₂ 98% RA • Pain 6/10
POC glucose 0800: 168 mg/dL

FETAL HEART TRACING

Baseline 150 bpm • moderate variability • two accelerations in 20 min • no decelerations. Category I.

CONTRACTION PATTERN

Every 3 min • 60 sec • moderate by palpation. Resting tone soft.

CERVICAL EXAM • MEMBRANES

Dilated 5 cm • 80% effaced • station -1 • vertex. SROM at 0700, clear fluid, no odor.

ORDERS

- Continuous EFM • LR 125 mL/hr (no dextrose)
- Insulin infusion per GDM labor protocol — target 70–110 mg/dL
- Penicillin G 5 million units IV q4h (GBS prophylaxis)
- POC glucose q1h
- Anesthesia for epidural per client request

Step 1 — Recognize Cues

Which findings should the nurse identify as **concerning** for the GDM laboring client? *Select all that apply.*

A. Glucose 168 mg/dL

B. EFW 4,350 g

C. Moderate variability with accelerations

D. SROM with clear fluid 1 hour ago

E. BMI 34

F. Contractions every 3 min, moderate

A, B, E

Hyperglycemia (168), macrosomia risk (EFW 4,350 g approaches 4,500), and obesity (BMI 34) are all risk factors for shoulder dystocia, fetal hypoxia, and postpartum hemorrhage.

C: reassuring tracing. D: clear fluid SROM at 1 hr is expected. F: normal active labor pattern.

Step 2 — Analyze Cues

Drag each finding to the linked complication it most strongly predicts:

Glucose 168 mg/dL → fetal hyperinsulinemia / fetal hypoxia / future late decelerations / postnatal hypoglycemia

EFW 4,350 g + BMI 34 → shoulder dystocia, brachial plexus injury, cesarean risk, PPH from atony

SROM with vertex at -1 in macrosomic fetus → cord prolapse risk

Linkages confirmed

The cluster — hyperglycemia + macrosomia + obesity + recent SROM with a high station — defines the safety priorities for the next hour: glucose control, FHR vigilance, anticipating shoulder dystocia.

Update — 0930. Client now 7 cm, 100% effaced, 0 station. Epidural placed at 0900; BP dropped to 88/54 after epidural. Glucose 175 mg/dL. Tracing: baseline 165, minimal variability, two late decelerations in the last 10 min. Oxytocin had been started at 0915 at 6 milliunits/min for augmentation, now infusing.

Step 3 — Prioritize Hypotheses

What is the most likely cause of the late decelerations?

A. Maternal sepsis from chorioamnionitis

B. Uteroplacental insufficiency from post-epidural hypotension + maternal hyperglycemia + early tachysystole

C. Fetal head compression from descent

D. Cord prolapse

B

Late decelerations with minimal variability after epidural hypotension in a hyperglycemic GDM client = classic uteroplacental insufficiency. A is unlikely (afebrile, clear fluid). C produces early decelerations. D would produce variable or prolonged decelerations and is a sudden event.

Step 4 — Generate Solutions

Which interventions should the nurse plan? *Select all that apply.*

A. Stop the oxytocin infusion.

B. Reposition to left lateral.

C. Administer IV bolus of LR (no dextrose) per order.

D. Administer ephedrine or phenylephrine per anesthesia for hypotension.

E. Recheck glucose; titrate insulin per protocol.

F. Notify provider.

G. Administer methylergonovine IM.

H. Apply O₂ 10 L/min non-rebreather per facility policy if indicated.

A, B, C, D, E, F, H

Comprehensive intrauterine resuscitation. **G is wrong** — methylergonovine is a postpartum uterotonic and is contraindicated in hypertension.

Step 5 — Take Action

Place the first 5 actions in order:

A. Stop oxytocin

B. Reposition to left lateral

C. IV bolus per order

D. Notify provider

E. Recheck glucose & titrate insulin

ORDER • A → B → C → D → E

Stopping oxytocin and repositioning are simultaneous bedside actions and come first; IV bolus next; then notify provider; glucose recheck and insulin titration follow as the FHR stabilizes.

Step 6 — Evaluate Outcomes

After 15 minutes: BP 112/70, tracing baseline 150, moderate variability returns, no decelerations × 10 min, glucose 118 mg/dL. Which finding indicates effective resuscitation? *Select all that apply.*

A. Return of moderate variability.

B. Resolution of late decelerations.

C. Glucose down to 118 mg/dL.

D. Maternal BP normalized.

E. Cervix unchanged at 7 cm.

A, B, C, D

All four are markers of effective intrauterine resuscitation. E (no change in cervix in 15 min) is irrelevant for outcome evaluation here.

Outcome. Maria delivers a 4,480 g infant vaginally at 1120 with brief McRoberts assistance, no dystocia. Apgars 8/9. Newborn glucose at 30 min = 36 mg/dL → fed at breast → recheck at 60 min = 48 mg/dL. Skin-to-skin maintained. Maternal fundus firm with IV oxytocin; insulin infusion held immediately after placental delivery. Postpartum glucose 92 mg/dL.

SECTION 09

"What Should the Nurse Do First?" — 5 Prioritization Mini-Scenarios

SCENARIO 1

A laboring GDM client at 8 cm reports sudden shortness of breath and a "gush of fluid." FHR drops to 80 bpm.

First action: Perform an immediate sterile vaginal exam to assess for cord prolapse while calling for help. If cord palpated, place the client in knee-chest position and manually elevate the presenting part until cesarean. Notify provider STAT and prepare OR.

SCENARIO 2

A GDM client on an oxytocin induction has contractions every 90 seconds with late decelerations. Glucose is 188 mg/dL.

First action: Stop the oxytocin infusion. Then reposition to left lateral, IV bolus (no dextrose), notify provider, O₂ per policy if indicated, recheck glucose. Stopping oxytocin is part of intrauterine resuscitation — it is not a separate downstream step.

SCENARIO 3

A 1-hour-old newborn of a diabetic mother is jittery with a glucose of 28 mg/dL. The infant has a strong suck and is rooting.

First action: Initiate feeding (breastfeed or formula 5–10 mL/kg) while preparing IV access in case glucose remains low. Recheck glucose in 30 minutes. If IV started, anticipate D10W 2 mL/kg bolus per provider order. Maintain skin-to-skin for thermoregulation.

SCENARIO 4

A G2P2 with GDM is 45 min postpartum after birth of a 4,610 g infant. Fundus is boggy, deviated to the right; pad is saturated.

First action: Massage the fundus while having the client void (or straight cath if unable). A full bladder is a top cause of atony — the bladder must be empty for the uterus to contract. Increase IV oxytocin per order, monitor VS, and prepare second-line uterotonics if no response.

SCENARIO 5

During the birth of a 4,520 g infant, the head delivers but the shoulders do not advance — turtle sign.

First action: Call for help and start the dystocia clock. Then McRoberts maneuver (hyperflex thighs to abdomen), suprapubic pressure per provider direction. Never apply fundal pressure. Alert neonatal team for resuscitation.

SECTION 10

Stop, Hold, or Escalate — 5 Decision Drills

DECISION 1 • STOP

Stop oxytocin when: contractions are >5 in 10 min, duration >90 sec, resting tone insufficient, Category II not responding to repositioning, or Category III tracing. In the macrosomic GDM client, the threshold to stop is lower because tolerance is lower.

DECISION 2 • HOLD

Hold scheduled insulin and basal insulin infusions immediately after placental delivery. Maternal insulin needs drop by ~50% in minutes. Recheck glucose q1–2h postpartum. Many test items punish nurses for "just finishing the bag."

DECISION 3 • HOLD

Hold methylergonovine in any client with hypertension, preeclampsia, severe range BP, or migraine history. Use oxytocin first; if methergine is ordered and BP is elevated, call back to clarify before administering.

DECISION 4 • ESCALATE

Notify provider/escalate when newborn glucose remains <40 mg/dL after one feed + buccal dextrose gel, or any glucose <25 mg/dL in the first 4 hours. Anticipate IV D10W bolus and continuous infusion; transfer to higher level of care if persistent.

DECISION 5 • EMERGENCY

Activate OB emergency / prepare for emergency birth when: cord prolapse, shoulder dystocia not resolving with McRoberts + suprapubic pressure, Category III tracing, eclamptic seizure, suspected uterine rupture, or PPH unresponsive to first-line uterotonics. In a GDM client, also escalate for DKA with non-reassuring FHR.

SECTION 11

5 Common NCLEX Traps

1. **Choosing D5LR as the default IV fluid in a laboring GDM client.** Wrong — use LR or 0.9% NS. Dextrose IV is reserved for documented maternal hypoglycemia.
2. **Continuing the insulin infusion postpartum.** Wrong — hold it. The placenta drove the resistance; without the placenta, the same dose causes hypoglycemia.
3. **Giving methylergonovine to a preeclamptic GDM client for PPH.** Wrong — contraindicated in hypertension. Use oxytocin first; consider misoprostol or carboprost (carboprost not in asthma).
4. **Applying fundal pressure for shoulder dystocia.** Wrong — worsens impaction and risks uterine rupture and brachial plexus injury. Use suprapubic pressure with McRoberts.
5. **Treating an asymptomatic newborn with glucose 38 mg/dL as "fine."** Wrong — below the 40 mg/dL action threshold. Feed and recheck even if the infant looks well.

SECTION 12

End-of-Day Quick Review

10 must-remember points

1. Maternal glucose target in labor: 70–110 mg/dL; check q1–2h.
2. Use LR or 0.9% NS in laboring GDM — not D5.
3. Late decelerations in GDM = uteroplacental insufficiency from fetal hyperinsulinemia.
4. Macrosomia = $\geq 4,000$ g; cesarean if EFW $\geq 4,500$ g with diabetes.
5. Polyhydramnios + SROM = cord prolapse risk → assess FHR immediately.
6. Shoulder dystocia: McRoberts + suprapubic pressure. Never fundal.
7. Postpartum insulin needs drop ~50% immediately — hold the drip.
8. Newborn hypoglycemia threshold: <40 mg/dL (or <25 first 4 hr).
9. Feed first for asymptomatic hypoglycemia; D10W IV for severe/symptomatic.
10. GDM mothers are at high risk for PPH — assess the fundus and empty the bladder.

5 red-flag findings

- ① Glucose >140 or <70 in labor · ② Late decelerations with minimal/absent variability · ③ Turtle sign · ④ Newborn glucose <25 mg/dL or symptomatic at any value · ⑤ Boggy fundus with macrosomic birth.

5 "never do this" rules

① Never give methergine in hypertension · ② Never apply fundal pressure for shoulder dystocia · ③ Never continue oxytocin during intrauterine resuscitation · ④ Never use D5 IV as the default in a hyperglycemic GDM client · ⑤ Never continue scheduled insulin postpartum without rechecking glucose.

5 fetal monitoring clues

① Tachycardia + minimal variability in GDM → think hyperglycemia or chorio · ② Late decels = stop oxytocin first · ③ Variable decels = reposition (cord) · ④ Prolonged decels = work up for cord prolapse, hypotension, abruption, rupture · ⑤ Absent variability + recurrent decels = Category III, expedite delivery.

5 medication safety clues

① Insulin antidote = D50 IV · ② Methergine contraindication = hypertension · ③ Carboprost contraindication = asthma · ④ Terbutaline raises maternal glucose — recheck after dosing · ⑤ TXA is an adjunct, not a replacement for uterotonics + massage.

SECTION 13

Standalone Infographic — Day 9 at a Glance

SCREENSHOT THIS

GDM → Macrosomia → Newborn Hypoglycemia

One picture of the pathway, from maternal glucose to neonatal care.

1 • MOTHER IN LABOR

- Glucose target **70–110**
- Check **q1–2h**
- IV: **LR / NS** (no D5)
- Insulin drip per protocol
- Continuous EFM

2 • WATCH THE FETUS

- Baseline 110–160
- Moderate variability
- Late decels = **stop oxytocin**
- Reposition · IV bolus · notify
- O₂ per policy if indicated

3 • BIRTH RED FLAGS

- Turtle sign → **McRoberts**
- + Suprapubic pressure
- **Never fundal pressure**
- EFW ≥4,500g + DM → cesarean
- Cord prolapse with SROM

4 • POSTPARTUM MOTHER

- **Hold** insulin after placenta
- Recheck glucose q1–2h
- Massage fundus often
- Empty bladder
- PPH risk = HIGH

5 • NEWBORN TRANSITION

- Skin-to-skin early
- Glucose at **30–60 min**
- Threshold **<40 mg/dL**
- Feed → recheck 30 min
- D10W if severe/symptomatic

6 • MEDICATION RULES

- Insulin antidote: **D50**
- Methergine: no HTN
- Carboprost: no asthma
- Terbutaline ↑ glucose
- TXA = adjunct only

The one-line pathway → Mother high glucose → fetal hyperinsulinemia → high O₂ demand → late decels → macrosomia → shoulder dystocia / cesarean → **cord clamped** → newborn insulin keeps working → **neonatal hypoglycemia** → feed + recheck + IV D10W if needed.

Five numbers to memorize tonight

- **70–110 mg/dL** — maternal glucose target in labor
- **<40 mg/dL** — newborn hypoglycemia threshold after 4 hr (<25 in first 4 hr)
- **≥4,500 g** — macrosomia + diabetes → cesarean
- **2 mL/kg** — D10W bolus for severe neonatal hypoglycemia
- **50%** — drop in maternal insulin needs immediately postpartum