SYSTEM: MATERNAL-NEWBORN · OB EMERGENCY

Shoulder *Dystocia*

NCLEX-RN 2026 · NGN CLINICAL JUDGMENT · HIGH-YIELD REVIEW

TIME-CRITICAL OBSTETRIC EMERGENCY

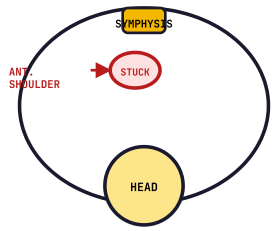
Bottom line: Shoulder dystocia is the impaction of the fetal anterior shoulder behind the maternal symphysis pubis *after the head delivers*. It is unpredictable, unpreventable, and demands immediate, systematic action. Delay > 5–7 minutes risks fetal hypoxia, brachial plexus injury, and death.

01 Definition & Overview

- **What it is:** Obstetric emergency in which the fetal anterior shoulder lodges behind the maternal symphysis pubis after delivery of the head, preventing routine shoulder delivery.
- **Why it matters:** Cord compression between fetal body & maternal pelvis causes rapid fetal hypoxia. Every minute counts — head-to-body interval > 5 min sharply increases neonatal morbidity/mortality.
- **Key fact:** Cannot be reliably predicted or prevented. Every L&D nurse must know the response algorithm cold.

02 Pathophysiology (Step-by-Step)

1. Fetal head delivers normally through the introitus
2. Anterior shoulder fails to rotate under the symphysis pubis & becomes **impacted** behind it
3. Head retracts tightly against perineum → **"Turtle Sign"**
4. Umbilical cord compressed between fetal body & pelvis → ↓ uteroplacental perfusion
5. Fetal hypoxia, acidosis, bradycardia → risk of HIE, brachial plexus injury, or demise



ANTERIOR SHOULDER IMPACTED BEHIND SYMPHYSIS

Top Risk Factors: Macrosomia (>4000g) · DM/GDM · Maternal obesity · Post-term · Prolonged 2nd stage · Vacuum/forceps · Prior dystocia (recurrence ~10–15%)

03 Signs & Symptoms

HALLMARK SIGNS (RECOGNIZE IMMEDIATELY)

- **"Turtle Sign"** — fetal head emerges then retracts tightly against the perineum (like a turtle pulling into its shell)
- **Failure of restitution** — head does not rotate spontaneously to face the maternal thigh
- **Difficulty delivering the chin** over the perineum
- **No descent of shoulders** with normal maternal pushing or gentle downward traction

DETERIORATION / RED-FLAG FINDINGS

- **Head-to-body interval > 60 seconds** without shoulder delivery
- **Fetal bradycardia** (<110 bpm) — cord compression worsening
- **Worsening fetal acidosis** on cord pH if obtained
- **Maternal hemorrhage** developing (atony, lacerations, possible rupture)
- **Inability to deliver shoulder** despite McRoberts + suprapubic pressure

NEVER rely on prenatal estimates of fetal weight alone to predict dystocia — most cases occur in average-sized infants. **ALWAYS** be prepared at every delivery.

04 Priority Nursing Interventions · HELPERR Algorithm

H	E	L	P	E	R	R
HELP	EPISIOT.	LEGS	PRESSURE	ENTER	REMOVE	ROLL

H **HELP — Call for help immediately.** Activate the OB emergency response: additional RNs, OB provider, anesthesia, NICU. **NOTE THE TIME** the head delivered — start your clock.

E **EVALUATE for Episiotomy.** Provider decision — shoulder dystocia is a *bony* impaction, but episiotomy may allow room for internal maneuvers.

L **LEGS — McRoberts Maneuver (FIRST-LINE).** Two nurses hyperflex the mother's thighs sharply against her abdomen. Flattens lumbar lordosis, rotates the symphysis cephalad. Resolves ~40–60% of cases alone.

P **PRESSURE — Suprapubic Pressure.** Firm downward + lateral pressure *just above the symphysis pubis*, directed toward the fetal anterior shoulder. **NEVER FUNDAL PRESSURE** — worsens impaction, risks uterine rupture.

E **ENTER — Internal Rotation.** Provider inserts a hand vaginally: Rubin II (push posterior aspect of anterior shoulder toward fetal chest) or Woods Corkscrew (rotate posterior shoulder 180°).

R **REMOVE the Posterior Arm.** Provider sweeps fetal posterior arm across the chest and delivers it first, reducing shoulder diameter.

R **ROLL — Gaskin All-Fours Maneuver.** Roll mother onto hands and knees; gravity shifts the pelvis and often dislodges the shoulder.

ABC + Safety Checklist (concurrent with HELPERR):

- **A/B:** Neonatal resuscitation team at bedside; warmer, bag-mask, suction ready.
- **C:** Confirm IV access; prepare 2nd IV; type & screen; anticipate PPH.
- **Stop oxytocin** if infusing. **Empty bladder** (straight cath) to optimize pelvic space.
- **Time-stamp every maneuver** — documentation is medico-legally critical.
- **Do NOT pull harder on the head** beyond gentle axial guidance — risks brachial plexus injury.

05 Pharmacology (Adjunctive)

UTEROTONIC · STOP

Oxytocin (Pitocin)

During dystocia:
Discontinue — reduces uterine activity.
Postpartum:
Restart for 3rd-stage management & PPH prevention.
Nursing:
Monitor BP, tone, fundus, lochia. Watch water intoxication.

UTEROTONIC · PPH

Methylergonovine

Action:
Sustained uterine contraction — 2nd-line for PPH.
Contraindication:
HTN & preeclampsia — check BP first.
Nursing:
0.2 mg IM. Hold if BP ≥ 140/90.

PROSTAGLANDIN · PPH

Carboprost (Hemabate)

Action:
Strong uterine contraction — 3rd-line for atonic PPH.
Contraindication:
ASTHMA — bronchospasm risk.
Side effects:
Diarrhea, N/V, fever.

TOCOLYTIC · RESCUE

Terbutaline

Action:
Uterine relaxation — facilitates intrauterine manipulation.
Side effects:
Maternal tachycardia, tremor, hyperglycemia.
Nursing:
Hold if HR >120; monitor glucose, lung sounds.

LOCAL · EPISIOTOMY

Lidocaine 1%

Action:
Local anesthesia for episiotomy / perineal repair.
Max dose:
4.5 mg/kg plain. Confirm no allergy.
Toxicity:
Tinnitus, perioral numbness, seizures, arrest.

VOLUME · PPH

LR/NS + Blood Products

Action:
Restore intravascular volume; maintain perfusion.
Indication:
EBL >1000 mL, hypovolemia signs.
Nursing:
Large-bore IV ×2, type & cross, MTP if shock.

06 NCLEX Test Traps

✗ **Fundal pressure** looks helpful, is dangerous — worsens impaction & risks uterine rupture. ✓ **Suprapubic** pressure only.

✗ "Pull harder on the head" — wrong every time. ✓ Gentle, axial traction only. Excessive lateral pull = **brachial plexus injury (Erb's palsy)**.

✗ Confusing maneuver order. ✓ FIRST after recognition: **call for help + McRoberts**. NOT internal rotation first.

✗ Believing dystocia is preventable with planned C/S for "big babies." ✓ Routine C/S only for EFW ≥ 5000g (≥ 4500g in diabetics) — most dystocias occur in normal-weight infants.

✗ Choosing "supine, legs extended" to assist. ✓ **McRoberts = hyperflex thighs to abdomen**, not flat extension.

✗ Brachial plexus injury = permanent paralysis. ✓ **Most resolve** in 6–12 mo with PT; ~10% permanent.

✗ Newborn clavicle fracture = malpractice. ✓ Intentional clavicle fracture is an *accepted* maneuver; heals well in neonates.

✗ Skipping documentation because "the emergency was the priority." ✓ **Document every maneuver with exact times** — head-to-body interval is pivotal.

✗ "Shoulder dystocia means no vaginal birth again." ✓ Recurrence ~10–15%, but vaginal birth remains reasonable with counseling.

07 Patient & Family Education

Prenatal / Antepartum

- **Glucose control** in GDM/DM reduces (does not eliminate) macrosomia & dystocia risk.
- **IOM-guided weight gain** reduces maternal obesity contribution.
- Discuss **risk factors** if present; avoid blame — dystocia is largely unpredictable.
- Review what to expect if dystocia is recognized (calm, coordinated team response).

Postpartum / Newborn

- Watch newborn for **unequal arm movement**, decreased Moro → brachial plexus injury.
- Report **poor feeding, irritability, lethargy** → possible HIE.
- Clavicle fracture: **pin sleeve to shirt**, gentle handling, expect full healing.
- Monitor mom for **PPH signs** at home: saturating a pad <1 hr, dizziness.
- Provide **emotional support & debriefing** — births involving dystocia can be traumatic.
- Future pregnancies: **recurrence ~10–15%**; discuss delivery planning.

08 Memory Boosters & Mnemonics

KEY HELPERR — The Action Algorithm

- **H** **Help** — call OB, anesthesia, NICU; note time
- **E** **Evaluate** for episiotomy
- **L** **Legs** — McRoberts (hyperflex thighs)
- **P** **Pressure** — SUPRAPUBIC (never fundal)
- **E** **Enter** — internal rotation (Rubin/Woods)
- **R** **Remove** the posterior arm
- **R** **Roll** — Gaskin all-fours

RISK BIG BABY — Risk Factors

- **B** **Big** baby (macrosomia >4000g)
- **I** **Insulin** — diabetes / GDM
- **G** **Gained** too much weight (obesity)
- **B** **Beyond** due date (post-term)
- **A** **Assisted** delivery (vacuum/forceps)
- **B** **Boy** — male fetus (slightly ↑ risk)
- **Y** **Yesterday's** dystocia (prior history)

NEVER The 3 F's — Forbidden Moves

- **F** **FUNDAL pressure** → worsens impaction, uterine rupture
- **F** **FORCEFUL traction** → brachial plexus injury
- **F** **FAST yanking / lateral pulling** → Erb's palsy

SIGN "Turtle Sign" 🐢

Fetal head emerges, then **retracts tightly** against the perineum — like a turtle pulling into its shell. The *pathognomonic visual* of shoulder dystocia and your cue to call HELPERR.

⚡ Complications At-A-Glance

MOTHER 🤱

- Postpartum hemorrhage (atony, lacerations)
- 3rd / 4th degree perineal laceration
- Symphysis pubis separation
- Uterine rupture (esp. with fundal pressure)
- Bladder / urethral injury
- Psychological trauma — PTSD risk

NEWBORN 👶

- **Brachial plexus injury** — Erb's palsy (C5–C6, most common), Klumpke's (C8–T1)
- **Clavicle fracture** (most heal well)
- Humerus fracture
- Hypoxic-ischemic encephalopathy (HIE)
- Cord-compression acidosis
- Fetal demise (rare, <0.5%)