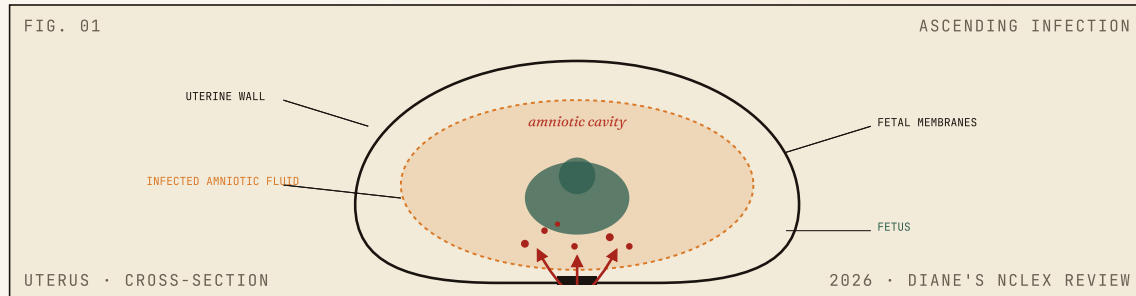


OB / MATERNAL -
NEWBORN

NCLEX-RN 2026 • NGN CLINICAL JUDGMENT • INTRAPARTUM
COMPLICATIONS

Chorio*amnionitis*

Intraamniotic Infection • "Triple I" — Inflammation, Infection, or Both



INCIDENCE

2–5%

of term deliveries

#1 RISK FACTOR

Prolonged ROM

>18 hours

FIRST SIGN

Fetal Tachy

FHR >160 bpm

TREATMENT

Deliver + Abx

Don't delay birth

01 Definition & Overview

WHAT IT IS • WHY IT MATTERS

An **acute inflammatory infection** of the amniotic fluid, fetal membranes, placenta, and/or decidua — usually a **polymicrobial ascending infection** from the lower genital tract. Now formally termed "**Triple I**" (Intrauterine Inflammation, Infection, or both) per the 2015 NIH workshop & current ACOG guidance.

Who's at risk

Patients with ROM >18 h, PROM/PPROM, multiple vaginal exams, prolonged labor, GBS+, internal monitoring, or meconium-stained fluid.

Why we care

Leading cause of **maternal sepsis**, postpartum **endometritis**, neonatal sepsis, preterm birth, and long-term neuro injury (cerebral palsy).

Bottom line

Always **2 patients** — mom & baby. **Delivery is the cure**; antibiotics are the assist. Diagnosis is *clinical*, not delayed for labs.

02 Pathophysiology

ASCENDING INFECTION • MATERNAL & FETAL RESPONSE

STEP 1

Vaginal/cervical flora (GBS, *E. coli*, **anaerobes**, **Ureaplasma**) colonize lower tract.



STEP 2

Membrane barrier compromised — ROM, PROM, or cervical dilation.



STEP 3

Bacteria **ascend** into amniotic cavity → inflammation of membranes & fluid.



STEP 4

Maternal cytokine release → fever, tachycardia, contractions.



STEP 5

Fetal inflammatory response (FIRS) → fetal tachycardia, hypoxia, sepsis.

Key insight: The fetus often shows signs *before* mom does — fetal tachycardia frequently precedes maternal fever because the fetus has fewer cooling mechanisms and a smaller volume of distribution for inflammatory mediators.

03 Signs & Symptoms

EARLY → LATE • CLINICAL DIAGNOSIS

ACOG Diagnostic Criteria — Suspected "Triple I"

Maternal temp $\geq 39.0^{\circ}\text{C}$ (102.2°F) on a single measurement, *OR* **temp 38.0–38.9°C (100.4–102°F)** on two readings 30 minutes apart **PLUS one of:** fetal tachycardia >160 bpm for >10 min • maternal WBC $>15,000$ (no steroids) • purulent fluid from cervical os.

EARLY FINDINGS

- **Fetal tachycardia >160 bpm** (often first sign)
- Maternal tachycardia >100 bpm
- Low-grade maternal fever (38.0–38.9°C)
- Mild uterine irritability / increased contractions
- Maternal chills, malaise

LATE / SEVERE FINDINGS

- High fever $\geq 39.0^{\circ}\text{C}$ (102.2°F)
- **Fundal / uterine tenderness** between contractions
- **Foul-smelling or purulent** amniotic fluid
- Maternal leukocytosis (WBC $>15,000$)
- Decreased FHR variability, late decels
- Signs of sepsis: $\downarrow$ BP, $\uparrow$ RR, AMS

RED FLAGS — ESCALATE IMMEDIATELY

- **Persistent fetal tachycardia + minimal variability** — impending fetal compromise
- **Maternal hypotension, tachypnea, altered mental status** — sepsis pathway
- **Purulent / foul fluid at SROM/AROM** — confirmed infection, expedite delivery

04 Priority Nursing Interventions

ABC • SAFETY • NCLEX
PRIORITIZATION

- ASSESS** **Continuous EFM** for fetal tachycardia, variability, late decels. Maternal vitals q1–2 h (temp, HR, BP, RR, SpO₂). This is your *first action* — confirms severity & fetal status.
- ADMINISTER** **Broad-spectrum IV antibiotics STAT** — Ampicillin + Gentamicin per protocol. Do *not* wait for culture results. Start as soon as diagnosis is suspected.
- SUPPORT** **Expedite delivery** — notify provider; vaginal birth preferred if no obstetric contraindication. Antibiotics do *not* replace delivery.
- TREAT** **Acetaminophen** 650–1000 mg PO/PR for maternal fever; **IV fluids** for hydration and to support BP.
- NOTIFY** **Alert neonatal team** to be present at delivery — newborn needs sepsis evaluation & 48-h observation.
- LIMIT** **Minimize vaginal exams** — each exam reintroduces bacteria. Strict aseptic technique with every assessment.
- MONITOR** **Strict I&O**, lactate, sepsis screening. Postpartum: watch for **endometritis** (fever, foul lochia, fundal tenderness) & continue antibiotics if ordered.

05 Pharmacology

BROAD-SPECTRUM COVERAGE • INTRAPARTUM START

DRUG / CLASS	DOSE	MECHANISM & COVERAGE	NURSING CONSIDERATIONS
Ampicillin Aminopenicillin	2 g IV q6h	Cell wall inhibitor; covers GBS, E. coli, gram-positives . First-line backbone of regimen.	Check PCN allergy . Monitor for rash, anaphylaxis, GI upset. IV push over 3–5 min.
Gentamicin Aminoglycoside	2 mg/kg load, then 1.5 mg/kg q8h (or 5 mg/kg q24h)	Inhibits bacterial protein synthesis; covers gram-negatives (E. coli, anaerobic synergy).	Nephro- & ototoxic . Monitor BUN/Cr, peak/trough levels, hearing. Caution in renal impairment.
Clindamycin (or Metronidazole) Lincosamide / Nitroimidazole	900 mg IV q8h	ADD if cesarean delivery — covers anaerobes (Bacteroides, Prevotella) to prevent endometritis.	Watch for C. difficile diarrhea. Infuse slowly to prevent hypotension. Avoid metronidazole if breastfeeding within 12–24 h.
Cefazolin (PCN-allergic, mild) 1st-gen cephalosporin	2 g IV q8h	Substitute for ampicillin if non-severe PCN allergy (no anaphylaxis history).	Cross-reactivity ~1% with PCN. Hold for severe PCN reaction → use Vancomycin + Gent instead.
Acetaminophen Antipyretic	650–1000 mg PO/PR q6h	Central COX inhibition; reduces maternal fever & secondary fetal tachycardia.	Max 4 g/day. Avoid NSAIDs antepartum (fetal ductal effects). Monitor LFTs if prolonged use.

Duration: Antibiotics begin *intrapartum* the moment diagnosis is suspected. After vaginal delivery (uncomplicated): often 1 additional dose. After cesarean: continue until afebrile and asymptomatic for 24 h.

06 NCLEX Test Traps ⚠️

COMMON CONFUSIONS • PRIORITY PITFALLS

"Mom feels fine — should I worry yet?" 01 YES. Fetal tachycardia is often the FIRST sign — it precedes maternal fever. Don't wait for mom to spike before escalating EFM concerns.	"Antibiotics started — can we hold off delivery?" 02 NO. Delivery IS the treatment. Antibiotics support the patient but do not replace expedited birth. Continued in-utero exposure worsens FIRS.
"Save antibiotics for postpartum?" 03 WRONG. Antibiotics begin INTRAPARTUM as soon as suspected. Delay = worse maternal & neonatal outcomes. Newborn benefits from in-utero treatment.	"Fever after epidural — is that chorio?" 04 Maybe not. Epidural can cause maternal fever without infection. But don't dismiss it — assess fetal HR, uterine tenderness, fluid character together.
"No foul-smelling fluid — rule it out?" 05 NO. Foul fluid is a LATE sign, not a screening criterion. Diagnosis can be made on fever + fetal tachycardia before fluid changes appear.	"Postpartum afebrile — discharge?" 06 Watch closely. Patients are at high risk for postpartum endometritis. Teach signs: fever, foul lochia, fundal pain. Don't skip the 6-week check.

07 Patient Education

DISCHARGE TEACHING • PREVENTION

DURING LABOR

- Importance of **timely delivery** even if tired or scared
- Why we limit vaginal exams after ROM
- Report decreased fetal movement, chills, increasing pain
- Expect continuous fetal monitoring

POSTPARTUM WARNING SIGNS

- Fever $>100.4^{\circ}\text{F}$ (38°C) after discharge
- **Foul-smelling lochia** or sudden increase in bleeding
- Severe pelvic / abdominal pain, fundal tenderness
- Flu-like symptoms, chills, malaise

NEWBORN OBSERVATION

- Baby will be monitored **48 hours** for sepsis signs
- Labs (CBC, blood culture) may be drawn
- Report poor feeding, lethargy, temperature instability
- Breastfeeding usually safe & encouraged

FUTURE PREVENTION

- Complete **GBS screening** at 36–37 weeks next pregnancy
- Treat BV / STIs promptly in pregnancy
- Avoid prolonged unprotected ROM at home — come in promptly
- Hand hygiene; safer sex practices

08 Memory Boosters

MNEMONICS • PATTERN RECOGNITION

F • U • N
F • A • T

Classic chorioamnionitis findings:

- F** — Fever (maternal) $\geq 38^{\circ}\text{C}$
- U** — Uterine / fundal tenderness
- N** — Neonate (fetal) tachycardia >160
- F** — Foul-smelling amniotic fluid
- A** — Amniotic fluid purulent
- T** — Tachycardia (maternal) >100

"Hot mom, hot baby, hot uterus."

The triad of maternal fever, fetal tachycardia, and uterine tenderness — your fastest pattern recognition.

"2 patients = 2+ antibiotics."

Mom & baby both at risk → broad coverage with **Amp + Gent**, add **Clinda** for cesarean.

"Delivery is the cure, antibiotics are the assist."

If it's chorio, the baby needs to come out. Don't let the test fool you into "wait and treat."