UNC SCHOOL OF MEDICINE

# Preterm Prelabor Rupture of Membranes (PROM)

24 0/7* to 33 6/7 weeks gestation

*Can apply this care plan at 23w0d if full intervention is desired at this GA

- Confirm diagnosis: Nitrazine, ferning, pooling of fluid with SSE (avoid digital exam if possible); consider PAMG- 1 (amnisure) in cervicovaginal fluid if diagnosis uncertain[1]
- GBS culture (see GBS algorithm)

[1]False + results can occur with significant bleeding and false neg results can occur if >12 hours from rupture or minimal fluid (per amnisure package insert)

Amnionitis
Abruption
Nonreassuring fetal head tracing

YES → Deliver

NO

Recommend latency antibiotics include:
Ampicillin** 2gm IV q6$^0$ first 48$^0$ followed by
Amoxicillin 250mg po tid x 5 days AND Erythomycin (EES) 250mg IV q 6$^0$ x 48$^0$ followed by EES 333mg q 8$^0$ x 5 days[2]
(Alternate regimen if EES not available: Azithromycin IV 500mg q 24$^0$ x 2 then 250mg x 5 days)[3]

**If PCN Allergy Erytho alone[4a]

Administer one course of antenatal corticosteroids; no evidence for rescue course with PROM;[4b]
Consider 12 hours of neuroprotective Mangesium if < 32 weeks

Appropriate Level of Care
Expectant management with observation for s/s infection

Once daily antenatal testing from the time of diagnosis (or increased frequency based on maternal or fetal condition)

- Delivery at 34 weeks, earlier with signs of infection, labor abruption or fetal compromise
- Give GBS prophylaxis if needed (see GBS algorithm) MgS04 neuroprotection if <32 weeks.

References


1. Amnisure- Tests for the presence of placental alpha microglobulin-1 protein in vaginal fluid. Per the package insert:
   - *Presence of significant blood on the swab can lead to a false positive result. The test functions properly in the presence of trace amounts of blood.*
   - *In very rare cases, when a sample is taken 12 hours or later after a rupture, a false negative result may occur due to the obstruction of fetus or resealing of the amniotic sac.*
   - *AmniSure should not be used earlier than 6 hours after the removal of any disinfectant solutions or medicines from the vagina.*

2. Antibiotic therapy for reduction of infant morbidity after preterm premature rupture of the membranes. A randomized controlled trial. National Institute of Child Health and Human Development Maternal-Fetal Medicine Units Network. Mercer BM, Miodovnik M, Thurnau GR, Goldenberg RL, Das AF, Ramsey RD, Rabello YA, Meis PJ, Moawad AH, Iams JD, Van Dorsten JP, Paul RH, Bottoms SF, Merenstein G, Thom EA, Roberts JM, McNellis D JAMA. 1997;278(12):989.

   *614 women with PPROM between 23 and 32 weeks were randomized to receive intravenous ampicillin (2-g dose every 6 hours) and erythromycin (250-mg dose every 6 hours) for 48 hours followed by oral amoxicillin (250-mg dose every 8 hours) and erythromycin base (333-mg dose every 8 hours) for 5 days vs placebo.*
   *Respiratory distress (44.1% vs 52.9%; P=.04), and NEC (2.3% vs 5.8%; P=.03) were less frequent in the group randomized to receive antibiotics.*

3. A retrospective comparison of antibiotic regimens for preterm premature rupture of membranes. Pierson RC, Gordon SS, Haas DM, Obstet Gynecol. 2014;124(3):515.

   *In this retrospective study of women with PPROM, prophylaxis with ampicillin plus erythromycin or ampicillin plus azithromycin resulted in similar pregnancy and neonatal outcomes (latency length; mean birth weight; rates of chorioamnionitis, cesarean delivery, low Apgar score, neonatal sepsis, neonatal respiratory distress syndrome)*

4. ACOG practice bulletin Number 188; Prelabor rupture of membranes; Obstet Gynecol. 2018 Jan; 131 (1)

   4a"*Although there are no well-studied alternative regimens for women allergic to b-lactam antibiotics, it may be reasonable to administer erythromycin alone."*

   4b *"A single course of corticosteroids is recommended for pregnant women between 24 0/7 weeks and 34 0/7 weeks of gestation, and may be considered for pregnant women as early as 23 0/7 weeks of gestation who are at risk of preterm delivery within 7 day."*





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