

PREMATURE RUPTURE OF MEMBRANES (PROM)

DEFINITIONS:

- Premature rupture of membranes (PROM): ROM at least 1 hour before the onset of labor
- Preterm premature rupture of membranes (PPROM): ROM before 37 weeks of gestational age
- Prolonged rupture of membranes: ROM > 18 hours
- May have combinations of the below, i.e. preterm premature ROM

ETIOLOGY: Multifactorial, strongest risk factor is genital tract infection. Also associated with cigarette smoking, low socioeconomic status, and prior preterm labor (PTL). Incidence is 1% and 1/3 go have preterm deliveries.

PRETERM RUPTURE OF MEMBRANES:

1. Determine EDC and method used (sure LMP or < 20 week US)
2. Monitor with EFM/TOCO
3. Sterile speculum exam for nitrazine, pooling and ferning tests
Visually assess cervical dilation (NO digital exams)
Obtain cultures for GC, chlamydia, and group B strep
4. Consult OB and ask for official US and assess fetal presentation (breech is a contraindication to vaginal delivery in prematurity), EFW, and amniotic fluid index by ultrasound
5. Labs: CBC with diff, cath UA/UC, UTOX screen, precautionary
6. IV access/hydration
7. Consider amniocentesis for gram stain with cell count, glucose, lung maturity studies, and culture (aerobic, anaerobic, ureaplasma species). If unable to perform amniocentesis, collect vag pool for DSL.

FETAL LUNG MATURITY STUDIES:

1. **DSL** (De-saturated lecithin)
(Done at U of M)
 - >1500 is mature
 - >2000 is mature if the pt. is diabetic
2. **L/S ratio** (Lecithin/Sphingomyelin)
(Done at U of M)
 - >1.5 is mature
 - >2.0 is mature if the pt. is diabetic
 - Not relied on heavily at HCMC
3. **PGE** (Phosphatidyl Glycerol)
 - (+) Is mature
 - (-) Is immature
 - A reliable test for maturity

4. **FLM** (Fetal Lung Maturity) *commonly used at HCMC

> 100 = probably mature in diabetes

> 50 = probably mature

20-49 = possibly mature

< 20 = probably immature. Respiratory Distress Syndrome is likely.

May also use vaginally pooled fluid for PG or FLM if there is no blood. If bloody, it must be sent to the University of Minnesota for DSL.

- If 24 to 34 weeks, consider Betamethasone 12 mg IM q 24 hours x 2 doses
- If pursuing **expectant** (i.e. watch and wait, NOT active labor) **management and <35 weeks**, start on antibiotics; check with OB for current regimen
- If preterm delivery is expected and GBS status is unknown, place on penicillin for group B strep (chemoprophylaxis)
- Monitor for infection by following mom for fever and fetal heart rate (tachycardia). CRP and WBC count are of not reliable indicators of infection in this setting and should not be used to make clinical decisions.

FP Obstetrics, 2nd Edition
CDC Group B Strep Guidelines