



- **Important terminologies:**
 - **Pre-term:** 28 weeks - < 37 weeks
 - **Term:** 37 weeks - < 42 weeks
 - **Post-term:** \geq 42 weeks
- **Normally, membranes rupture spontaneously in 2nd stage of labour (in 99% of cases).**
- **Definition of PROM:** rupture of membranes before the onset of labour.
- **What are the risk factors for PROM:**
 - **Smoking.**
 - **Multiple gestation.**
 - **Polyhydramnios.**
 - **Uterine fibroids.**
 - **Hydrops fetalis.**
 - **Congenital weakness of the membranes.**
 - **Infections:**
 - ✓ With gram-negative organisms (most commonly \rightarrow β -hemolytic streptococci).
 - ✓ Infections result in production of PGs which lead to increased uterine contractions or direct lysis of the membranes thus premature rupture of the membranes.
 - **Cervical incompetence:**
 - ✓ Notice that progesterone maintains pregnancy in the 1st trimester.
 - ✓ While a closed cervix maintains pregnancy in 2nd and 3rd trimesters.
- **The patient will present to the hospital complaining of “gush of fluid” and with ultrasound you will find oligohydramnios \rightarrow how would you differentiate if it is liquor of inflammation or urine?**
 - **Look for the presence of meconium or hair or wax (which is covering the body of the baby) \rightarrow if one of these is present in the fluid \rightarrow this is amniotic fluid.**
 - **If you can smell ammonia \rightarrow then, this is urine.**
 - **Specific test can be done to differentiate amniotic fluid:**
 - ✓ Pooling (+)
 - ✓ Nitrazine (+)
 - ✓ Ferning (+)
- **Management of PROM:**
 - **PROM + uterine contractions \rightarrow deliver.**
 - **PROM + Chorioamnionitis (indicated by the presence of fever) \rightarrow IV broad-spectrum antibiotics (clindamycin with ampicillin/erythromycin) + delivery.**
 - **PROM with no uterine contractions but there is abnormal CTG \rightarrow deliver.**
 - **PROM with no uterine contractions and normal CTG:**
 - ✓ Pre-term (24 – 36 weeks): hospitalize the patient, administer betamethasone, give broad-spectrum antibiotics.
 - ✓ Term (\geq 37 weeks): deliver
- **Tocolytics can develop pre-term labour for a maximum of 48 hours:**
 - **β -adrenergic agonists:** they are not used anymore because they cause hyperglycemia, hypokalemia, cardiac arrhythmia and tachycardia.
 - **Endomethacin (PG synthesis inhibitors):** rarely used due to intrauterine closure of ductus arteriosus.
 - **MgSO₄:** adverse effects include respiratory depression and pulmonary edema.
 - **Oxytocin antagonists.**
 - **Calcium channel blockers:** might result in myocardial depression.