



## ENCOURAGING OUTCOME IN A CASE OF PREVIALBLE PRETERM PREMATURE RUPTURE OF MEMBRANE.

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**ABSTRACT** Previable PPROM refers to instances of premature rupture of membrane occurring before 24 weeks of gestation. The incidence of previable (< 24 weeks) PPROM is lower but associated with significant neonatal morbidity and mortality. The etiology of previable PPROM is multifactorial. It is hypothesized that a weakness in the chorioamniotic membrane occurs as a result of either membrane stretch or degradation of the extracellular matrix. Although there are many studies in PPROM occurring after 24 weeks of gestation, there are few regarding outcomes following previable PPROM at < 24 weeks. Because of uncertain perinatal prognosis and lack of clearly defined protocols, previable PPROM presents a unique management and counselling dilemma for clinicians(1). Antenatal corticosteroids, antibiotics, and magnesium sulfate may improve outcomes.(2) Here we present a case of previable ppprom managed with expectant management.

**KEYWORDS :** Previable preterm premature rupture of membrane(PPROM), expectant management, joint counselling.

### INTRODUCTION

#### CASE REPORT:

31 yr married since 5 yrs , non consanguineous marriage, 22 weeks of gestation spontaneous conception , came to our antenatal opd with h/o leaking pervaginuum since past 2 weeks and ultrasound s/o anhydraminos with no obvious congenital anomalies. Patient had no complain of fowl smelling discharge per vaginuum, no h/o fever or pain in abdomen.

Patient is a homemaker, hindu by religion, educated till 12th standard ,belonging to upper lower socioeconomic class according to Kuppaswamy classification.

Her routine antenatal investigations were within normal limits and normal first trimester screening test.

Patient had no significant past medical or surgical illness.

On clinical examination, patient was conscious, afebrile averagely built. Had pulse rate of 90 bpm regular in volume and blood pressure of 110/70 mmhg on right arm in supine position. Patient had no pallor,icterus,edema,clubbing or lymphadenopathy.

On per abdomen examination , uterus fundal height approximates 20 weeks of gestation ,relaxed tone with fetal heart present and regular ,heard with fetal hand held doppler.

On Perspeculum examination: no leak demonstrable os closed.

Routine investigations were advised along with high vaginal swab. Leucocytes count 7600 and high vaginal swab was no growth. Ultrasound done suggestive of single live intrauterine gestation with 420 gm weight with AFI 1 cm with no gross congenital anomalies

#### Plan of action:

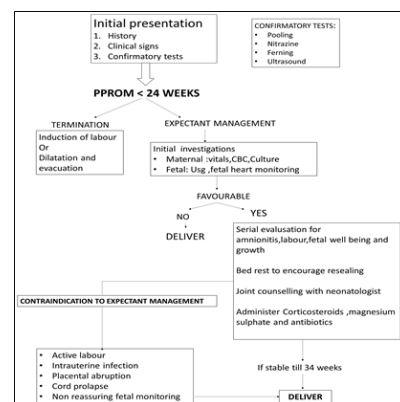
The maternal and fetal prognosis and pros and cons explained to the couple and they opted continuation of pregnancy with expectant management. The risk of sudden intrauterine fetal demise explained and consent for same taken.

#### MANAGEMENT AND OUTCOME:

Patient was admitted for expectant management . Antibiotics(cefuroxime 500mg bd) given for 7 days Patient was regularly monitored fortnightly for clinical and laboratory parameters . (CBC ,AFI ,fetal heart monitoring).Daily fetal heart, maternal temperature and pulse was monitored. Danger signs such as fever ,foul smelling vaginal discharge ,pain ,bleeding pv, etc explained to her At 26 weeks of gestation , ultrasound suggestive of AFI 1-2cm EFW-850 gms and with normal maternal vitals . Joint perinatal counselling

of the couple was done with neonatologist. The couple was explained regarding neonatal prognosis. Antenatal steroids covered. At 34+4 weeks, patient complain of pain in abdomen and spotting pervaginuum. Ultrasound done expected fetal weight 2.3 kg with AFI 3 cm. Again Joint counselling done, maternal and neonatal prognosis explained. Couple opted for cesarean section. Male baby 2.2 kg delivered uneventfully cried immediately after with no gross abnormalities. Baby was shifted to neonatal intensive care unit in view of respiratory distress syndrome . Baby Shifted to mother side on day 22. Mother and baby discharged and were on routine monthly follow up . Baby now is around 6 months with normal developmental milestones and no respiratory tract complications.

#### Management protocol we follow:



#### DISCUSSION:

Because of uncertain perinatal prognosis and lack of clearly defined protocols , previable PPROM needs tailor made management and counselling.

Women with previable PPROM are at risk for chorioamnionitis, hemorrhage, and the psychological and financial consequences of losing a child or raising a child with long-term morbidities. Such morbidities include pulmonary hypoplasia and chronic lung disease, restriction deformities, and other risks of extreme prematurity, such as retinopathy and intraventricular hemorrhage.(3) Because this relatively small percentage of preterm deliveries represents the highest burden on families, it is a logical area of focus because relatively small gains in care can lead to large improvement in outcomes for families.(1,4)

When PROM occurs at a previable gestation, a discussion should be held with the family reviewing the maternal risks of infection against

the fetal risks of significant morbidity and mortality during expectant management. When PROM occurs at a preterm, but potentially viable, gestation, discussion should ensue regarding the risk of fetal and maternal infection, as well as risks of preterm birth. This will allow the family to understand the benefit of antibiotics, steroids and expectant management. Careful monitoring of mother and fetus during expectant management should be undertaken, and delivery considered when documented or suspected lung maturity or signs of fetal infection, unrelieved fetal stress or advanced labor are noted. (8) The greatest challenge of the clinician is to decide the optimal time for delivery and balancing the benefits and risk ratio for both fetus and mother. (5) Counseling after the delivery for the recurrence risk of PROM should occur, and modifiable risk factors addressed.

#### TAKE HOME MESSAGE:

- Management requires balancing the potential neonatal benefits from prolongation of pregnancy with risk of intrauterine infections and its consequences for mother and neonate.
- Long latency periods are achievable after previable rupture of membrane
- Interdisciplinary counselling can help in giving potential perinatal outcome

#### CONCLUSION :

If multidisciplinary approach and customized management offered to couple in previable pprom, favorable perinatal outcome can be achieved.



Fig 1 USG at 22 weeks of patient with anydraminos



Fig 2: baby current photograph

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