

Premature Rupture of Membrane At Term!! Elective Intervention or Planned Management?? A Review



Medical Science

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ABSTRACT

Premature rupture of membrane (PROM) usually occurs most frequently at term (37 weeks or more of gestation). Various different modalities are available which leads to a dilemma in choosing the type of approach to be used. Oxytocin induction at term has been suggested as a gold standard for the management of PROM. Contrasting results of various studies adds to the difficulty in making a decision on the management and this review focuses on making a clinical decision based on the scientific data available.

Prelabour rupture of membranes (PROM) is defined as rupture of membranes prior to the onset of labour .

1 PROM most frequently occurs at term (37 weeks or more of gestation) 1, with the overall incidence of PROM at term being 8%. 2 Spontaneous onset of labour after term PROM usually follows within 24 hours , 2 with 79% of women labouring spontaneously within 12 hours, and 95% within 24 hours. 3 Even when the state of the cervix is unfavourable, the majority of women labour spontaneously within 24 hours. 4 However, if the woman does not labour within 24 hours, labour may be delayed up to seven days after membrane rupture 4, with longer latent periods in nulliparous women .5 PROM at term may be managed expectantly or by elective birth, usually by induction of labour. Planned elective early birth is usually termed active or planned management. Expectant management involves waiting for labour to occur and then making management decisions (such as inducing labour) if labour does not happen spontaneously after a specified period. PROM at term is known to be associated with overdistension of the uterus due to multiple pregnancy or polyhydramnios (abnormally high levels of amniotic fluid), cigarette smoking, altered mechanical properties of the amniotic membranes, frequent digital examinations, coitus and infection 1,4, although it is not clear if these are causally related to PROM. 4 PROM may result in immediate risks such as cord prolapse, cord compression and placental abruptions; and later problems such as maternal or neonatal infection, as well as the use of interventions such as caesareans and instrumental vaginal delivery. 6,8 Expectant management of term PROM has been associated with maternal infections such as chorioamnionitis (inflammations of the membranes) or endometritis (generally a postpartum infection). These infections may result in neonatal infection and mortality, chronic lung disease and cerebral palsy as well as serious morbidity for the mother. 4,5,6,8

Some reports have suggested that the risk of maternal and fetal infection increases proportionally with the time between mem-

brane rupture and birth 3, while others refute this. 4 Whether or not to induce labour may depend on the state of the cervix, with an insufficiently ripe cervix resulting in increased length of labour and failed induction requiring caesarean section. 1,2 Uterine rupture has been reported, but only rarely. Induction of labour for women with PROM at term may incur fewer costs than expectant management. 9 Women appear to be more satisfied with care when there is a short time between PROM and birth. 4 It is also found that with a longer interval from admission to the onset of labour, there is an increased incidence of neonatal intensive care unit admission, caesarean rates and more frequent maternal diarrhoea and use of analgesia or anaesthesia. 10 Induction of labour is supported by a retrospective study, 11 which reported increased perinatal mortality and intrapartum fever in women at term when there was delay of more than 72 hours between rupture of membranes and birth.

Oxytocin infusion was recommended as the gold standard management of PROM at term in a recent review. 12 These results are in contrast to the findings of another study, 13 which reported that induction of labour results in increased frequency of chorioamnionitis, neonatal sepsis, caesarean section and longer duration of hospitalisation. Another study highlighted the risks and benefits of induction of labour, with reduced rates of chorioamnionitis, endometritis and neonatal infection, and increased number of caesarean births. 14

Conclusion:

It is found that 70% of patients enter labour with PROM. For this irriective of cervical status if we do the active management of PROM by early induction by Prostaglandin E2 Cervical gel, then this is a safe and effective method. Induction by Oxytocin drip is also considered as Gold standard. Active management shortens PROM Delivery interval without increase in the rate of Caesarean Section. It also decreases maternal and Neonatal morbidity and hospital Stay.

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