



POSITION STATEMENT

PREMATURE RUPTURE OF MEMBRANES (PROM) AT TERM

Background:

Premature rupture of membranes at term (PROM) affects 8%-10% of pregnant women. When women have PROM without labor contractions, expectant management or immediate induction of labor is offered.¹ Many women prefer expectant management but there is a concern that expectant management may engender a higher risk of chorioamnionitis and neonatal sepsis when compared to the incidence of infection in women who undergo immediate induction. For this document, expectant management is defined as *watchful waiting until spontaneous labor occurs*.

The TermPROM study², a multicenter, randomized trial that included 5,041 women at term with premature rupture of membranes, is the largest prospective study conducted to date that has investigated the effect of expectant management on maternal and neonatal infection. The results of this study have been referenced as evidence that immediate induction of labor is safer than expectant management.³

There was a higher incidence of uterine infection in the women in the expectant management arm of this trial.² However, the TermPROM study had several important limitations that affected the incidence of maternal infection:

- The threshold for diagnosis of chorioamnionitis was 37.5°C on two or more occasions \geq 1 hr apart or a temperature of \geq 38°C which is lower than the temperature of 38°C that is commonly used to diagnose chorioamnionitis. This study definition possibly resulted in an over-diagnosis of chorioamnionitis.
- Many women in the study had digital vaginal examinations upon entry to the study.² Multiple digital vaginal examinations are an independent risk factor for uterine infection, and a stronger predictor of chorioamnionitis than duration of ROM.⁴ In a secondary analysis of the TermPROM data set, the authors found that when multiple vaginal exams are minimized, a lengthy interval from ROM to birth had a minimal impact on development of chorioamnionitis.⁴
- 10.7% of the women in this study were colonized with Group B Streptococcus (GBS) when they entered the study protocol. The results of these cultures collected at entrance to the study were not known to the clinicians managing these labors.⁵ Because the study was conducted prior to publication of the current Centers for Disease Control and Prevention (CDC) guidelines for antibiotic prophylaxis for GBS colonization,^{6,7} a minority of the women in this study who were GBS + were given antibiotic prophylaxis during labor.⁵ Colonization with GBS also increases the risk for chorioamnionitis approximately twofold (21% if GBS+ vs. 12% if GBS-).^{4,8} Unfortunately, studies have

not been conducted comparing induction to expectant management in women who are not colonized with GBS. It is, therefore, difficult to extrapolate these results to a population of women who have had cultures at 35-37 weeks and are not colonized with GBS when PROM at term occurs, the population in which expectant management is an option.

The incidence of neonatal infection was not higher in the expectantly managed groups in the TermPROM study when compared to the women managed with immediate induction.¹ Although more perinatal deaths occurred in the expectant-management groups than in the induction groups, this difference was not statistically significant. Four deaths, not attributable to congenital anomalies, occurred in the expectant management group, and none occurred in the induction groups (p=0.125). One death was related to birth trauma, one to GBS sepsis, and two were secondary to asphyxia.

The use of the results of the TermPROM study to suggest rates of chorioamnionitis are higher in women managed expectantly is questionable given the clinical management of women managed expectantly in this study predisposed women to develop chorioamnionitis.

Position:

Consistent with the philosophy of the American College of Nurse Midwives that women have a right to self determination in their care, it is the position of the American College of Nurse-Midwives that women receive counseling and informed consent about the risks and benefits of management options of PROM at term and be allowed to select expectant management as a safe alternative to induction of labor under the following conditions:

- A term, uncomplicated, singleton, vertex pregnancy with clear amniotic fluid
- Absence of identified infection, including GBS, Hepatitis B & C, HIV
- Absence of fever
- No evidence of significant risk for fetal acidemia in the fetal heart rate and fetal heart rate pattern.
- Expectant management requires minimization of digital vaginal examinations, including avoidance of a baseline vaginal exam.

ACNM recommends that further research be conducted comparing induction to expectant management for women colonized with GBS.

REFERENCES

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Source: Division of Standards and Practice, Clinical Practice Section
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