

Pre-labour rupture of membranes at term

Key Points

- Pre-labour rupture of membranes (PROM) at term occurs from 37+0 weeks gestation onwards.
- Women with pre-labour rupture of membranes at term should be offered a choice of immediate induction of labour or expectant management following a discussion surrounding the risks and benefits of both choices.
- A baby who has any symptom of possible sepsis or born to a woman with evidence of chorioamnionitis should have observations commenced and recorded on a NEWTT chart and be referred to the paediatrician without delay.

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Abbreviations

EPR	Electronic Patient Record
GBS	Group B streptococcus
HIV	Human Immunodeficiency Virus
HVS	High vaginal swab
LVS	Low vaginal swab
NEWTT	Newborn Early Warning Track and Trigger
PROM	Pre-labour rupture of membranes
RCOG	Royal College of Obstetricians and Gynaecologists
USS	Ultra sound scan
VE	Vaginal Examination

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Introduction

Pre-labour rupture of membranes (PROM) at term occurs from 37+0 weeks gestation onwards.

Initial management and diagnosis

Women who contact the maternity unit with pre-labour rupture of membranes must be asked to attend for assessment. Women booked for a homebirth should be seen by a community midwife for a home assessment.

A full assessment should be undertaken and documented including observations of temperature, pulse and blood pressure. An abdominal palpation should be performed and recorded and a brief history of the pregnancy taken. History taking should include the history surrounding the rupture of membranes including the time of rupture of membranes, amount and colour of liquor. The electronic patient record (EPR) and appropriate electronic results system should be checked for any risk factors, in particular group B streptococcus status.

Do not perform a speculum examination if there is a clear history of ruptured membranes and liquor can be seen draining. Do not perform an LVS or take a C-reactive protein.¹

Avoid digital examination in the absence of contractions. If a woman has had a VE consider this may increase her risk of infection and include this in your discussion of immediate induction versus conservative management.

If it is uncertain whether pre-labour rupture of membranes has occurred offer to perform a speculum examination to determine if the membranes have ruptured. If no liquor is visualised the woman should be encouraged to cough.

If the history is inconclusive or no liquor is visualised on speculum examination advise the woman to wear a maternity sanitary towel and return to the maternity unit with the pad if it becomes wet. Advice should be given to return if she feels unwell, develops pyrexia or experiences an offensive vaginal loss or a reduction in fetal movements. A HVS should only be taken if there are signs of infection.

Immediate induction vs. expectant management

Women with pre-labour rupture of membranes at term should be offered a choice of immediate induction of labour or expectant management following a discussion surrounding the risks and benefits of both choices¹. This discussion should be documented in the woman's EPR.

Advise women presenting with pre-labour rupture of the membranes at term that:

- the risk of serious neonatal infection is 1%, rather than 0.5% for women with intact membranes
- 60% of women with pre-labour rupture of the membranes will go into labour within 24 hours
- Induction of labour is appropriate approximately 24 hours after rupture of the membranes.

Immediate induction of labour

Immediate induction of labour should be advised in the following circumstances:

- Signs of infection- maternal pyrexia $\geq 37.5^{\circ}\text{C}$, fetal heart $> 160 \text{ bpm}$, maternal tachycardia $\geq 100 \text{ bpm}$
- Concerns relating to the fetal heart
- Meconium stained liquor
- Known group B streptococcus (GBS) carrier in the current pregnancy, a baby affected by GBS in a previous pregnancy or GBS in previous pregnancy with no negative swab prior to rupture of membranes this pregnancy. Appropriate swabs as per RCOG guideline, should be done between 35-37 weeks. Antibiotic should be given according to the Prevention of Group B Streptococcal (GBS) infection guideline.

- Recent vaginal infection (e.g. gonorrhea, trichomonas, herpes, chlamydia)
- HIV infection
- Intrauterine death
- Vaginal bleeding

If immediate induction of labour is indicated or chosen by the woman this should be commenced as soon as labour ward activity allows.

Conservative Management

If the feto-maternal assessment is within normal limits and the pregnancy uncomplicated, conservative management should be offered. The following criteria must be met:

- Singleton pregnancy
- 37 completed weeks gestation
- Cephalic presentation
- Head engaged in the pelvis
- Liquor clear and inoffensive in smell
- Normal vital signs and fetal movements
- Not a group B streptococcus carrier in the current pregnancy, or group B streptococcus status unknown if positive, during previous pregnancy or pregnancies.
- Patient consent obtained,
- Cephalic presentation confirmed by USS at this triage attendance.

If the woman chooses to go home she should return approximately 24 hours after rupture of membranes. An information leaflet, together with a date and time to return should be given to the women prior to discharge. If she chooses to remain in hospital she should be transferred to the antenatal ward to await events. The labour ward co-ordinator should be informed of the date and time women are expected to return to ensure this is documented in the appropriate work diaries.

Antibiotics

Antibiotics are recommended even in the absence of a positive GBS finding when ruptures of membranes have occurred for 48 hours or more. If there is evidence of infection in the woman or if there is a pyrexia greater than 38 degrees a full course of broad spectrum antibiotics should be prescribed as per the antibiotic policy for obstetrics (cover for GBS should be included). Please refer to the adult antimicrobial guide for more details:

<https://viewer.microguide.global/guide/1000000134/content/adult-antenatal-sepsis>

Advice to women

Women should be advised of the following

- Record temperature 4 hourly during waking hours
- Attend maternity triage if temperature rises above 37.4°C
- Attend maternity triage if there is a change in colour or smell of her vaginal loss
- Attend maternity triage if a change in fetal movements occurs
- Attend the maternity department if she begins to have regular contraction - women with ruptured membranes for over 24 hours will need to be seen in an environment where continuous fetal monitoring can be performed.
- Bathing and showering are not associated with an increase in infection but sexual intercourse may increase the risk and therefore should be discouraged.
- If labour has not started 24 hours after rupture of the membranes the woman should be advised to give birth where there is access to neonatal services.
- If expectant management beyond 24 hours is planned women should be advised to attend for assessment every 24 hour to undertake feto-maternal assessment.

Previous Caesarean section

If the woman is intending to have a vaginal birth after Caesarean section she should be reviewed by an obstetric registrar. Women may be sent home if feto-maternal assessments are within normal limits. Further management should be based on individualised care plans made within the antenatal period or following discussion with the on call consultant if individualised care plans are not documented.

If the woman has previously agreed on a planned Caesarean section she should be added to the next elective Caesarean section list if there is room. Otherwise a category 3 Caesarean section should be arranged.

Postnatal care

If the time between ruptured membranes and onset of labour is over 24 hours women should be asked to remain for at least 12 hours post-delivery in the maternity unit. This does not include if labour has occurred within 24 hours of ruptured membranes even if delivery occurs after 24 hours of ruptured membranes as during labour the mother and baby will be monitored for signs of infection and treated appropriately if signs identified.

Women with prelabour rupture of membranes should be asked to contact a healthcare professional immediately if they have any concerns about their babies' wellbeing in the first 5 days of life and particularly within the first 12 hours when the risk of infection is greatest.

Asymptomatic term babies born to women with a history of prelabour rupture of membranes for longer than 24 hours prior to the onset of established labour should be closely monitored for the first 12 hours of life. This should occur at 1 hour, 2 hours and then 2 hourly until 12 hours of age. These observations should include:

- General wellbeing
- Chest movement and nasal flaring
- Skin colour including perfusion
- Feeding
- Muscle tone
- Temperature
- Heart rate and respiration

A baby who has any symptom of possible sepsis, or born to a woman with evidence of chorioamnionitis should have observations commenced and recorded on a NEWTT chart and be referred to the paediatrician without delay.

Auditable Standards

All women offered conservative management meet the criteria.

All women going home have a time and date to return and an information leaflet.

All babies born after a history of PROM >24 hours prior to established labour have appropriate monitoring.

Monitoring

This guideline will be subject to three yearly audit and results presented to the department clinical audit meeting. Action plans will be monitored at the quarterly department clinical governance meeting. The audit midwife takes responsibility for initiating and reporting the audit.

References

1. National Institute for Health and Care Excellence [NICE] (2023) Intrapartum care. NG235. Available at: <https://www.nice.org.uk/guidance/ng235> (Accessed: 17 November 2023).

Full version control record

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This guideline has been registered with the Trust. However, clinical guidelines are guidelines only. The interpretation and application of clinical guidelines will remain the responsibility of the individual clinician. If in doubt, contact a senior colleague or expert. Caution is advised when using guidelines after the review date.

This guideline is for use in Frimley Health NHS Foundation Trust hospitals only. Any use outside this location will not be supported by the Trust and will be at the risk of the individual using it.

Version History

Version	Date	Guideline Lead(s)	Status	Comment
1.0	Sept 2015	D Perkins, S Coxon	Final	Approved at OCGC 3rd September 2015
1.1	May 2016	D Perkins, S Coxon	Amendment	minor amendment in Antibiotics section to align with new GB Strep guideline
2.0	June 2019	D Perkins, S Coxon	Final	Approved at OCGC 11th June 2019
3.0	October 2024	B. Sagoo	Final	Full review and update Ratified at OCGC 01/10/2024

Related Documents

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Guide	Trust Micro guide.