GMCA GREATER MANCHESTER COMBINED AUTHORITY

NHS
Greater Manchester and Eastern Cheshire
Strategic Clinical Networks

Greater Manchester and Eastern Cheshire SCN

Pre-Labour Spontaneous Rupture of Membranes (SROM) at Term (>37 weeks) Guideline

September 2018
Version 1

Document Control

Ownership

Role	Department	Contact
Project Clinical Lead	Dr Teresa Kelly	Teresa.Kelly2@cmft.nhs.uk
Project Manager	GMEC SCN	Joanne.langton@nhs.net
Project Officer	GMEC SCN	Fran.davies@nhs.net

Title	• Pre-labour Spontaneous Rupture of Membranes at Term 37 weeks plus • Version 1, September 2018
Supersedes	• New document
Author	• Originated / ~~Modified~~ By: Dr Teresa Kelly • Designation: Consultant Obstetrician, St Marys Division, & C.M.F.T. • System, GMEC Maternity Transformation Board
Ratification	• Ratified by: GMEC Maternity Steering Group • Date of Ratification: 31st August 2018
Application	• All Staff
Circulation	• Issue Date: 31st August 2018 • Circulated by joanne.langton@nhs.net
Review	• Review Date: August 2020 • Responsibility of: GMEC SCN
Date placed on the Intranet:	• November 2018

1 Introduction

Pre-labour spontaneous rupture of membranes (SROM) at term (>37wks) is a common occurrence in 8-10% of pregnancies (Cammu et al, 1990). Spontaneous labour follows spontaneous rupture of membranes (SROM) in about 60-80% of women by 24 hours, and approximately 90% by 48 hours.

Pre-labour spontaneous rupture of membranes is deemed *preterm* when it occurs before 37 weeks gestation (Deering et al 2007). For cases <37 weeks, see separate guideline *Management of Pre-labour Rupture of Membranes before 37 weeks gestation.*

The risk of serious neonatal infection is 1% compared with 0.5% for women with intact membranes at onset of labour (NICE, 2014).

The Cochrane review demonstrates no convincing evidence of the benefit for mothers or neonates from the routine use of antibiotics for Pre-labour SROM at term. Antibiotics should not be routinely used for pregnant women with ruptured membranes prior to labour at term, unless a woman shows signs of infection.

2 Details of Procedural Document

2.1 All clinicians responsible for the care of women with suspected or confirmed Pre-labour SROM have an obligation to undertake the following as applicable:

2.1.1 Inform women of the rationale for initially waiting for spontaneous labour but recommend induction of labour (IOL) at about 24 hours onwards if labour does not occur. Note: Longer conservative management beyond 24hrs with appropriate monitoring should also be supported if the woman wishes. This must be decided by a senior obstetrician (ST5+) and on a case by case basis.

2.1.2 Provide women with enough information to facilitate an informed decision as to place of delivery (see *section 2.4.4* and the local guideline *for Management of Neonates at Risk of Early Onset Sepsis on the Postnatal Wards*)

2.1.3 Confirm or exclude if group B strep (GBS) has been isolated from swabs or urine in the current pregnancy.

2.2 Pre-labour Spontaneous Rupture of Membranes at term (SROM)

Many women are suitable for conservative care at home or on a Midwifery Led Unit However, in the presence of obstetric risk factors, regular observations on a Consultant led Unit may be more appropriate.

2.3 Initial Assessment:

If a woman presents with potential Pre-labour SROM with no contractions at >37^{+0} weeks gestation, confirm:

- Stable, longitudinal lie (check presentation by scan if necessary)
- Normal fetal heart rate pattern - on admission, auscultation of the fetal heart must be performed with a Pinard stethoscope and/or hand held Doppler. For women with risk factors, electronic fetal monitoring (CTG) should be performed (refer to local guidelines on *Fetal Monitoring in Labour* and *Reduced Fetal Movements Guideline*).
- Normal maternal pulse rate, temperature or other early warning score (EWS) markers of sepsis (i.e. no suspicion of infection) (Refer to local *Maternal Early Warning Score (MEWS/MEOWS) Guideline*).

- Exclude group B strep (check microbiology reports and/ or yellow GBS stickers in notes) and for meconium (See *2.3.1 and 2.3.2*).

2.3.1 There is no indication to routinely carry out a speculum examination with certain history of rupture of membranes at term (NICE, 2014). However, if the diagnosis of SROM is questionable, a clinical decision may be made to perform a sterile speculum examination. Avoid digital vaginal examination in the absence of contractions and/or suspected abnormal lie/CTG/fetal heart trace.

2.3.2 **I**f pooling of amniotic fluid is not observed, consider performing an insulin-like growth factor binding protein-1 test or placental alpha-microglobulin-1 test of vaginal fluid.

2.3.3 If there is no liquor seen on speculum examination and/or the insulin-like growth factor binding protein-1 test or placental alpha-microglobulin-1 test is negative, it is highly unlikely that PROM has occurred and the woman should be discharged home with advice to return if she has any vaginal loss or any other concerns.

2.3.4 Lower vaginal swabs and maternal C-reactive protein (CRP) should not be routinely performed, including after 24 hours of Pre-labour SROM if there is no clinical suggestion of infection (NICE, 2014).

2.3.5 Appendix 1, gives a suggested format for documentation which can be produced as a sticker for the notes.

2.4 High-Risk Women

All women under consultant led care or those who are deemed high risk following suspected or confirmed prelabour SROM must be invited/referred to the Triage/maternity assessment following which time they may be transferred to either an antenatal ward, an induction bay or the Delivery Unit based on her level of risk/findings of her initial assessment. Refer to GMEC *Induction of Labour Guideline* and local *Group B Hemolytic Streptococcus in pregnancy and childbirth guideline.*

2.5 Group B Haemolytic Streptococcus (GBS)

Women above 37^{+0} weeks gestation with GBS: advise immediate IV antibiotics and augmentation of labour as soon as workload permits. See local *Group B Haemolytic Streptococcus in pregnancy and childbirth guideline*; GMEC *Induction of Labour Guideline* and *local Obstetrics Anti-infective Prescribing Guidelines*.

2.5.1 Meconium

Women above 37^{+0} weeks gestation with meconium stained liquor advice immediate augmentation of labour as soon as workload permits. See *Induction of Labour Guideline*.

2.6 Low-Risk Women

2.6.1 In the absence of any signs of infection or complications all low risk women may be invited to go home to await events. Details of when to return must be discussed (See section *2.4.2*) and SROM and IOL leaflets issued or details of an on-line address for leaflets given. Details of the discussion and the fact the leaflet has been issued or discussed must be recorded.

2.6.2 A provisional time and date for IOL, at or before 24 hours post SROM (NICE, 2008), must be booked according to the local procedure and the woman should be informed of the arrangements. If an IOL slot is not available at the point of 24hours SROM, midwives must contact an obstetrician (ST5+) to obtain a tailored management plan. Upon admission IOL will be commenced as soon as practicable. Women should be advised this may not necessarily be on the date they are admitted. See *Induction of Labour Guideline*.

2.6.3 The evidence for intrapartum antibiotic prophylaxis (IAP) for women with term prelabour SROM is unclear (RCOG, 2014) and NICE recommends that in the absence of additional risk factors and/or clinical signs of infection in the woman, antibiotics should **not** be given to either the woman or the baby, even if the membranes have been ruptured for over 24 hours (NICE, 2014). The 2014 Cochrane systematic review demonstrates no convincing evidence of benefit for mothers or neonates from the routine use of antibiotics for prelabour SROM at or near term.

See also *Section 2.6* and local *Guideline for Management of Neonates at Risk of Early Onset Sepsis on the*

Postnatal Wards.

2.6.4 **Low risk** women must be informed that in the presence of suspected or confirmed prelabour SROM they can continue to receive midwifery led care on the Midwifery Led Unit, on the proviso they:

- remain apyrexial and/ or are free of any signs of infection
- go into spontaneous labour

If not, arrangements must be made for transfer to a Consultant led unit for review.

2.6.5 Women who are booked for home birth should be informed that if the **prelabour** SROM is more than 24 hours **prior to the onset of labour**, then neonatal observations are advised for 12 hours post-delivery (irrespective of intrapartum antibiotics or length of time since rupture of membranes) and that it is only possible to facilitate this in hospital.

If this is the case they can continue their intrapartum care on the Midwifery Led Unit providing the above conditions are met (Section *2.4.4*). If women change their minds at this time and decide to have a hospital birth on the MLU or Delivery Unit they must be advised to attend MLU or the Triage/maternity assessment at the onset of labour.

It is important that women are given the opportunity to make an informed decision regarding their selected place for delivery.

If a woman chooses to decline neonatal monitoring and wishes continue with her plan for a homebirth the senior midwife on duty for the Unit should be informed.

See also *Section 2.6* and the local *Guideline for Management of Neonates at Risk of Early Onset Sepsis on the Postnatal Wards.*

2.6.6 All details of the discussion and final decision made must be documented chronologically and clearly in the case notes.

If, at any stage, there is evidence of infection in the woman a full course of broad-spectrum IAP must be prescribed and delivery expedited. See local *Obstetrics Anti-infective Prescribing Guidelines* and/or local *Antibiotic Surgical Prophylaxis Guidelines for Adults G85 – obstetric surgery*

2.7 Detecting signs of Infection

2.7.1 See local guidelines which may include:

- *Maternal Early Warning Score (MEWS/MEOWS) Guideline*
- *Severe Sepsis Policy Obstetrics Anti-infective Prescribing Guidelines*
- *Antibiotic Surgical Prophylaxis Guidelines for Adults G85 – obstetric surgery*

2.7.2 Low risk women that fall in the criteria for expectant management should be advised to record their temperature every 4 hours during waking hours and to report any change in the colour or smell of their vaginal loss immediately.

- women must also be informed that bathing or showering is not associated with an increase in infection, but that having sexual intercourse may be.
- Fetal movement and heart rate must be assessed (See GMEC *Reduced Fetal Movement Guideline*) at initial contact and then every 24 hours following rupture of the membranes while the woman is not in labour and the woman must be advised to report immediately any decrease in fetal movements in the interim whether at home or in hospital.

2.8 Neonatal care

Women with prelabour SROM, **of more than 24 hours prior to the onset of labour**, should be advised they will need to stay in hospital for at least 12 hours following the birth (NICE, 2014) in order for neonatal observations to be performed.

For neonatal management and observations guidance see local *Guideline for Management of Neonates at Risk of Early Onset Sepsis on the Postnatal Wards.* Babies are risk assessed postpartum to decide treatment **irrespective** of whether mum has been given antibiotic prophylaxis in labour or length of time since rupture of membranes.

EXAMPLE

Patient A membranes rupture at 0800. She awaits spontaneous labour which starts at 0700 the next day. She delivers her baby at 1700 that day. Her and baby do not have any additional risk factors and therefore neonatal observations are not required.

2.9 Discharge/Postnatal Care

All women must be asked to inform their healthcare professionals immediately of any concerns they have about their baby's wellbeing in the first 5 days following birth.

2.10 Communication and Documentation

All women with learning disabilities, visual or hearing impairments or those whose first language is not English must be offered assistance with interpretation where applicable, and where appropriate assistance from a link worker must be sought. (i.e. in person or by using a telephone interpretation system) It is paramount that clear channels of communication are maintained at all times between all staff, the women and their families. Once any decisions have been made/ agreed, comprehensive and clear details must be given to the woman thereby confirming the wishes of the parents and their families.

The contents of any leaflet issued must be explained in full at the time it is issued. All communication difficulties (including learning difficulties) and language barriers must be addressed as outlined in the previous paragraph at the time the leaflet is issued.

Ensure the provision and discussion of information of the risks and benefits with women during the antenatal, intrapartum and postnatal periods. All details surrounding discussion of the risks and benefits together with explicit details of proposed management must be documented contemporaneously, in both hand held notes and the main notes as appropriate (NMC, 2015)

3 Equality Diversity and Impact Assessment

This document should be equality impact assessed using the Trust's Equality Impact Assessment (EqIA) framework.

4 Consultation, Approval and Ratification

This guideline has been approved and ratified in accordance with the agreed process.

5 Monitoring Compliance

This guideline should be monitored in accordance with the local units Obstetric Clinical Audit Plan. The findings of the audit report will be presented to staff via the Obstetric Clinical Effectiveness Group and where appropriate an action plan will be developed and monitored at the Obstetric Clinical Effectiveness Group meeting.

6 References and Bibliography

- Cammu H, Verlaenen H, Perde MP (1990) Premature rupture of membranes at term innulliparous women: a hazard? *Obstetrics and Gynaecology*, 76(4):671–4.
- Deering, SH et al. (2007) Fetal growth after preterm premature rupture of membranes: is it related to amniotic fluid volume? J. Matern. Fetal. Neonatal. Med. 20 (5): 397-400. doi:10.1080/14767050701280249.
- National Institute for Health and Care Excellence (NICE) (2014), Intrapartum care: care of healthy women and their babies during childbirth – NICE clinical guideline 190. London: NICE
- National Institute for Health and Care Excellence (NICE) (2008), Induction of Labour – NICE clinical guideline 70. London: NICE
- Nursing and Midwifery Council (2015) The Code - Professional standards of practice and behaviour for nurses and midwives, NMC: London
- Royal College of Obstetricians and Gynaecologists (RCOG) (2014), The Prevention of Early Onset Neonatal Group B Streptococcal Disease, Greentop Guideline No.36, London: RCOG**.**
- Simhan, H and T Canavan (2005) Preterm premature rupture of membranes: diagnosis, evaluation and management strategies. BJOG 112 (Supplement 1): 32-37. doi: 10.1111/j.1471-0528.2005.00582.x. PMID 15715592. http://www.blackwellpublishing.com/bjog.
- Tan, BP and Hannah, ME. (2001a) Prostaglandins versus oxytocin for prelabour rupture of membranes at term. Cochrane Database Syst Rev: Issue 2.
- Wojcieszek AM, Stock OM, Flenady V. Antibiotics for prelabour rupture of membranes at or near term. Cochrane Database of Systematic Reviews 2014, Issue 10. Art. No.: CD001807. DOI: 10.1002/14651858.CD001807.pub2.

7 Associate Guidelines GMEC and local

- Reduced Fetal Movements Guideline
- Guideline for Management of neonates at Risk of Early Onset Sepsis on the Postnatal Wards
- Fetal Monitoring in Labour
- Maternal Early Warning Score (MEWS) Guideline
- Induction of Labour Guideline
- Group B Strep guideline
- Guideline for the introduction or re-approval of a Clinical Guideline for Obstetric Practice
- Management of Pre-labour Rupture of Membranes before 37 weeks gestation

8 Abbreviations

Abbreviations	Definition
<	Less than
>	More than
≥	More than or equal to
AC	Abdominal circumference
AFFIRM	Awareness of Fetal movements and Focusing Interventions Reduce Fetal Mortality
AFI	Amniotic Fluid Index
RFM	Reduced Fetal Movements (RFM)
AN	Antenatal
ANC	Antenatal clinic
ANDU	Antenatal Day Unit
CESDI	Confidential Enquiry into Stillbirths and Deaths in Infancy
CRP	C-reactive Protein
CTG	Cardiotocograph
DVP	Deepest Vertical Pool
EWS	Early Warning Score
FGR	Fetal Growth Restriction
GBS	Group B Strep
IAP	Intrapartum Antibiotic Prophylaxis
IOL	Induction of Labour
IUGR	Intra Uterine Growth Restriction
LV	Liquor Volume
NHSE	NHS England
Outlying	Remote from centre
PAPP	Pregnancy-associated plasma protein
PET	Pre-eclampsia
PROM	Pre-labour Rupture of Membranes
SBL	Saving Babies' Lives
SFH	Symphysis Fundal Height
SGA	Small for Gestational Age
SROM	Spontaneous Rupture of Membrane
USS	Ultrasound
VBAC	Vaginal Birth After Caesarean

9 Appendix 1

<table>
<tr><td colspan="4">Confirmation Of Spontaneous rupture Of Membranes
Date ……../……../…….. Time …….:……..(24hr)</td></tr>
<tr><td>Presentation & Stable Lie:</td><td colspan="3"></td></tr>
<tr><td>Confirm no evidence of Group B Strep or meconium:</td><td colspan="3"></td></tr>
<tr><td>Induction of labour slot booked:</td><td>……/……/……</td><td>Ward ……</td><td>Telephone No.
0161 etc.</td></tr>
<tr><td>MEWS score:</td><td></td><td>Date ……../……/……</td><td>Time:</td></tr>
<tr><td>SROM and IOL information given</td><td>YES / NO</td><td colspan="2">Leaflet / Online</td></tr>
<tr><td colspan="4">Advised to monitor temperature every 4 hours and if raised to come to Hospital YES / NO</td></tr>
<tr><td colspan="4">Advised to return to hospital if any change in COLOUR or SMELL to PV Loss. YES / NO</td></tr>
<tr><td colspan="4">Advised to return to hospital if feels unwell or develops FLU like symptoms. YES / NO</td></tr>
<tr><td colspan="4">Plan if IOL slot is >24 hrs post SROM:

Sign: Date: Time: GMC/PIN :</td></tr>
</table>