



Aneurin Bevan University Health Board

Guideline for the Management of term pre- labour rupture of membranes

N.B. Staff should be discouraged from printing this document. This is to avoid the risk of out of date printed versions of the document. The Intranet should be referred to for the current version of the document.

Contents:

Introduction	3
Policy Statement	3
Aims	3
Objectives	3
Scope	3
Roles and Responsibilities	3
Training	3
Further Information Clinical Documents.....	3
List of Abbreviations	4
Pre-labour Spontaneous Rupture of Membranes (SROM) at term (≥ 37 weeks' gestation)	5
Appendix	13

Introduction

This document is a clinical guideline designed to support safe and effective practice.

Aims

To provide an individualised guideline to assist with discussion and management of term pre-labour spontaneous rupture of membranes.

Objectives

The purpose of this guidance is to aid the identification and management of term prelabour rupture of membranes (≥ 37 weeks). It is based upon the National Institute for Health and Care Excellence clinical guidelines NG235 intrapartum care and NG207 inducing Labour and further references can be obtained from that source.

Scope

This guideline applies to all clinicians working within maternity services.

Roles and Responsibilities

The Maternity management team are responsible to ensure that these guidelines are carried out.

Individual health care providers are responsible for ensuring that they are aware and adherent to up to date guidelines.

Training

Staff are expected to access appropriate training where provided. Training needs will be identified through appraisal and clinical supervision.

Further Information Clinical Documents

NICE clinical guideline NG235 intrapartum care

NICE clinical guideline NG207 inducing labour

RCOG Green-top Guideline No.36 – Prevention of early-onset neonatal group B streptococcal disease

List of Abbreviations

SROM – spontaneous rupture of membranes
PROM – prolonged rupture of membranes
GBS – group B streptococcus
MLU – midwifery led unit
CWS – Clinical WorkStation
GUH -Grange University Hospital
DAU – day assessment unit
RGH – Royal Gwent Hospital
NHH – Nevill Hall Hospital
YYF – Ysbyty Ystrad Fawr
IOL – induction of labour
VE – vaginal examination
ROM – rupture of membranes
BS – bishop score
VBAC – vaginal birth after caesarean

Pre-labour Spontaneous Rupture of Membranes (SROM) at term (≥ 37 weeks' gestation)

Definition

Pre-labour spontaneous rupture of membranes is defined as rupture of the fetal membranes before the onset of regular, painful contractions at or later than 37 weeks' gestation.

Initial assessment

Take a detailed history via telephone and document on CWS/BadgerNet. If the patient is contracting refer for labour assessment in the appropriate clinical environment per risk stratification (MLU or triage).

If any of the following are present or the patient requests immediate IOL advise prompt assessment in Maternity Triage, GUH:

Risk factors for prompt review in Triage
Meconium- stained liquor
Vaginal bleeding
Offensive liquor/vaginal discharge
Reduced fetal movements
Maternal pyrexia/patient feeling unwell
Group B streptococcus (can be seen on the MLU if MLC)
Multiple pregnancy
Non-cephalic presentation
Known placenta praevia/low lying placenta
Known SGA <10 th percentile
Previous caesarean(s)

Table 1: Risk Factors for prompt review in Triage

If no risk factors and good history of SROM patient can be reviewed in appropriate clinical site per risk stratification (triage/MLU/DAU RGH/NHH/YYF) at the earliest opportunity.

Clinical assessment: take full history. Observe and document the type, colour and odour of PV loss and undertake a full antenatal check (includes temperature, BP, pulse, RR, oxygen saturations, urinalysis, observe for PV loss, abdominal palpation, assess FM, auscultate FH and perform CTG if indicated – Dawes Reman if not contracting).

Do not carry out speculum examination if SROM diagnosis is certain. If uncertain perform a speculum examination with ROM Plus test only if diagnosis still unclear. Do not perform a digital VE routinely, only if

active labour is suspected. There is evidence to suggest an increased risk of chorioamnionitis with increasing numbers of VEs.

Discuss the risks and benefits of ongoing management including:

- Risk of serious neonatal infection is 1% rather than 0.5% in pregnancies with intact membranes and may increase over time.
- However, there does not appear to be an increased risk of neonatal infection with 24 hours of expectant management.
- Evidence suggests possible reduced risk of chorioamnionitis or maternal temperature in patients who opt for immediate IOL.
- 60% of patients with prelabour SROM will go into labour within 24hrs

ROM plus

ROM plus is a vaginal swab point of care test that detects the presence of alpha-fetoprotein and insulin-like growth factor-binding protein 1 which are found in amniotic fluid. It can be used at any gestation.

It has very good sensitivity (91.7% - 100%) and specificity (90.7% - 98.8%). It can be used in the presence of semen/infection/lubricant and small amounts of blood (<10% concentration). Significant amounts of bloody discharge can cause an erroneous result and is not recommended.

Performing test –

- prepare buffer
- collect sample – sterile swab 5-7cm into vagina for minimum of 15 seconds ideally at time of sterile speculum examination
- place swab tip into vial and mix swab with buffer for 15 seconds, discard swab
- dip testing strip into buffer solution and leave test in solution until liquid is seen in test area
- for accurate results read at 5-10 minutes
 - Positive – 2 lines. Treat as SROM
 - Negative- 1 line
 - Invalid – test line only or no lines. Repeat if clinically indicated

Immediate management

Any patients with placenta praevia, vaginal bleeding, non-cephalic presentation, signs and symptoms of sepsis/chorioamnionitis require prompt senior obstetric review and management per clinical condition.

GBS

Any patients confirmed GBS carriers in current pregnancy, any previous pregnancy without a negative swab in the current pregnancy or previously affected neonate should be offered immediate intrapartum antibiotics. If not actively labouring offer induction of labour-on-labour ward with oxytocin as soon as reasonably possible.

Meconium

Any patient presenting with pre-labour SRM with any type of meconium-stained liquor should be assessed by a senior obstetrician on labour ward. This should include a full antenatal review, which is to include an assessment for chorioamnionitis, continuous electronic fetal heart rate monitoring and discussion on appropriate ongoing management based upon clinical assessment. This may include induction of labour-on-labour ward with oxytocin, if appropriate.

Expectant management

Providing there are no adverse features or risks factors listed above and no concerns on clinical assessment the patient can choose to have expectant management or IOL as soon as possible. We would not recommend this is longer than 24 hours. The patient can go home with contact details for triage or MLU and tempadots if required with information on how to use to monitor temperature 4 hourly.

Pre-requisites for expectant management for 24 hours in term SRM

No signs of labour

Systemically well with no signs and symptoms of infection (full MEWS assessment must be documented on a MEWS chart)

The liquor is clear/pink and not offensive
--

There is no evidence of vaginal bleeding
--

Singleton, cephalic presentation

Normal auscultated fetal heart/CTG (preferably computerised CTG if not contracting meeting Dawes Redman criteria)

Inform patients:

- We can offer immediate IOL or expectant management of up to 24hrs if not in labour, arrange IOL if accepted. Discuss process of IOL and direct to BadgerNet reading list.
- Recommend monitoring and recording of temperature 4 hourly during waking hours. If feels unwell/pyrexial (temperature >37.5°C) contact triage.

- Change pads regularly and observe loss. If change in colour or smell of vaginal loss (specifically any signs of meconium/bleeding) to contact triage.
- Inform on latent phase
- Do not offer LVS/CRP for 24 hours expectant management
- Avoid sexual intercourse.
- Can continue to bath/shower.
- We would recommend they deliver in the consultant led delivery suite if SROM \geq 24 hours ago unless in active established labour (please request a senior obstetric review if any concerns).

If a patient declines IOL after 24 hours of expectant management, please inform of increased risk of infection and organise review by senior obstetrician or consultant midwife. Please see appendix 1: checklist for discussion with patients declining IOL after 24 hours of expectant management.

Previous caesarean

Any patient presenting with previous caesarean and SROM will require review by senior obstetrician, and discussion with individualised management plan. If patient is aiming for VBAC and has no other contra-indications or risks as above counsel for patient choice for expectant management or immediate induction of labour. IOL agents are limited to propress only and duration of propress administration will need to be individualised.

Induction of labour

SROM must be confirmed prior to booking IOL.

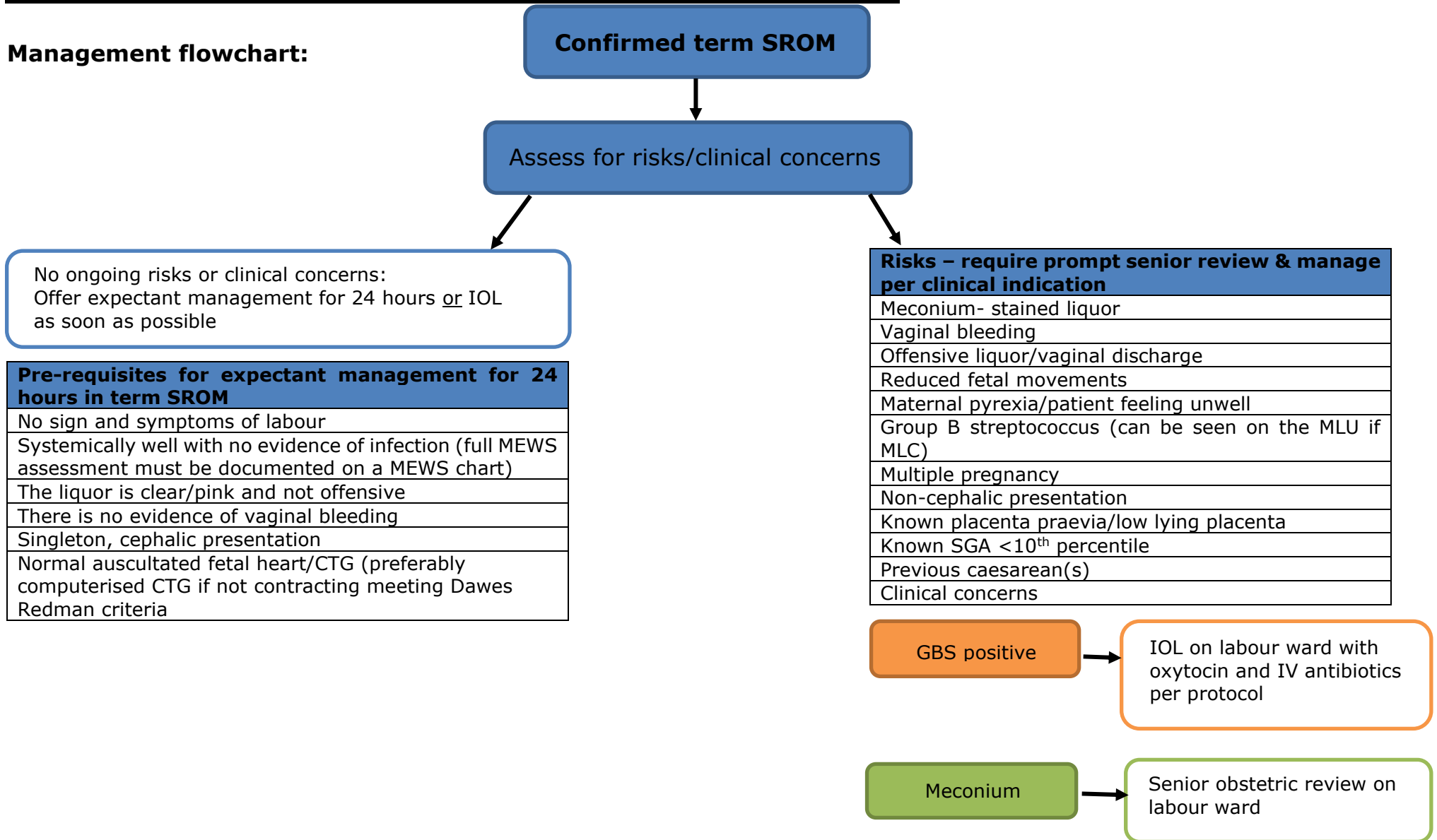
Offer ALL women with confirmed pre-labour SROM induction of labour as soon as possible versus expectant management - discussion as above. If expectant management recommend IOL by 24 hours after SROM.

Following admission for IOL follow IOL pathway. Assess VE via bishop score.

Women with BS \leq 6 should be offered a single 2mg prostin gel (unless had previous caesarean). If there is likely to be a significant delay of >6 hrs at the discretion of a senior obstetrician (consultant if possible) a second prostin can be considered if BS remains ≤ 6 . Women with a BS >6 should be transferred to labour ward, when possible, for ongoing induction with oxytocin. Vaginal examinations should be kept to a minimum and delays in IOL reduced as much as possible.

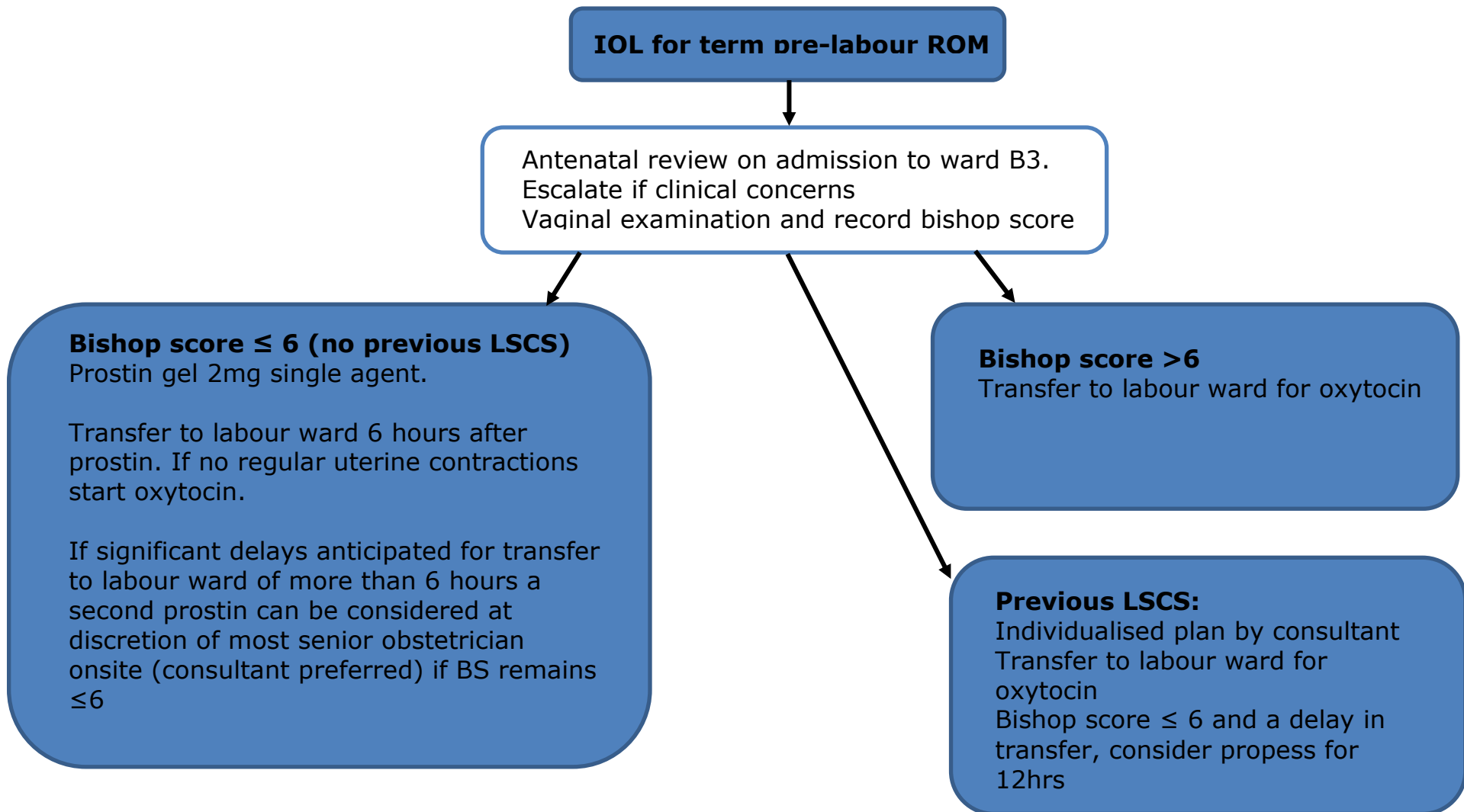
Women with previous caesarean requesting IOL either immediate or after expectant management require an individualised plan, by a consultant whenever possible. Aim for transfer to labour ward, at the earliest opportunity, for induction with oxytocin as primary agent. If there is likely to be a significant delay of >6hrs at the discretion of a senior obstetrician (consultant if possible) consideration for proppess administration following discussion of increased risk of uterine rupture with shortest duration possible (no longer than 12 hours).

Management flowchart:



Pre-requisites for expectant management for 24 hours in term SROM
No sign and symptoms of labour
Systemically well with no evidence of infection (full MEWS assessment must be documented on a MEWS chart)
The liquor is clear/pink and not offensive
There is no evidence of vaginal bleeding
Singleton, cephalic presentation
Normal auscultated fetal heart/CTG (preferably computerised CTG if not contracting meeting Dawes Redman criteria)

Risks - require prompt senior review & manage per clinical indication
Meconium- stained liquor
Vaginal bleeding
Offensive liquor/vaginal discharge
Reduced fetal movements
Maternal pyrexia/patient feeling unwell
Group B streptococcus (can be seen on the MLU if MLC)
Multiple pregnancy
Non-cephalic presentation
Known placenta praevia/low lying placenta
Known SGA <10 th percentile
Previous caesarean(s)
Clinical concerns



References

1. NICE clinical guideline NG235 intrapartum care
2. NICE clinical guideline NG207 inducing labour
3. RCOG Green-top Guideline No.36 – Prevention of early-onset neonatal group B streptococcal disease
4. ROM Plus product literature and quick reference guide

Appendix 1 – Checklist discussion with patients declining induction of labour after 24 hours expectant management

<p>Following SRM the majority of women will go into labour and go on to give birth to a healthy baby. Patients will always be supported in the choices they make regarding their labour, birth and place of birth; however, it is important that you are provided with the best evidence available and informed of the risks and benefits of both induction of labour and expectant management if your membranes have been ruptured for more than 24 hours.</p>	
<p>The risk of baby developing infection with prolonged rupture of membranes beyond 24 hours is around twice the risk if rupture of membranes has been less than 12 hours (1%). This risk increases the longer it takes from rupture of the membranes to onset of labour.</p>	
<p>It is recognised that babies whose membranes have ruptured are at increased risk compared to those with intact membranes. Consequently, we recommend having a review to check your observations and check baby’s heart tracing at least once every 24 hours until you go into labour.</p>	
<p>Primarily due to the increased risk of infection, the national recommendation is that you labour and deliver in a unit with an on-site specialist neonatal unit, and that baby stays for observation for at least 12 hours after delivery to see for any sign of infection. This would mean labour and delivery in either the consultant led unit – labour ward (CLU) or midwifery led unit (MLU) at GUH. Home birth in this situation is not recommended but you would be supported with this choice should you wish to birth at home.</p>	
<p>Developing infection in labour for you and baby is more likely the longer it is between the rupture of membranes and the delivery of baby. Monitoring baby in labour gives us an added check for infection. We do recommend continuous monitoring of baby in labour for all women who have had ruptured membranes for longer than 24 hours. This requires you to labour and deliver on the consultant led unit. If you prefer to have intermittent auscultation, then we will have a low threshold for recommending continuous monitoring especially if baby’s heartbeat is fast, as this is a sign of developing infection.</p>	
<p>Baby may have a poo inside the womb (meconium-stained liquor). This can be a sign that baby is in distress or struggling. If you notice a change in colour in the liquor, it is important to come in and get a review for both you and baby. Meconium in the liquor increases the risk of baby having</p>	

<p>breathing difficulties at delivery, and of baby having an infection. If there is meconium, it would reduce the risk to baby to have an induction of labour, regardless of how long it has been since the rupture of the membrane.</p>	
<p>You may have vaginal bleeding after rupture of the membranes. This is a serious risk factor, as it can be bleeding from the placenta which is providing baby with blood and oxygen. You should come in for review of you and baby at once if you notice any bleeding.</p>	
<p>If you start to feel unwell in any way, you should come in for a review so we can check on you and baby. This may be a sign of infection developing. Infections in pregnancy and labour can be quite severe, especially if they are not treated promptly. This would probably need treatment with IV antibiotics. There is no evidence that prophylactic antibiotics are of any benefit with rupture of membranes after 37 weeks, so we would not recommend this.</p>	