Aneurin Bevan University Health Board

Pre term Labour and Birth Guideline

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 This is to avoid the risk of out of date printed versions of the document.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.

Status: Issue 2
Approved by: Maternity Clinical Effectiveness Forum
Owner: Maternity Services

Issue date: 5th March 2024
Review by date: 5th March 2027
Policy Number: ABUHB/F&T/0997

Contents:

Introduction 3

Aims 3
Objectives 3
Scope 3
Roles and Responsibilities ....
Training 3
Standards for Health Services Wales 3
Equality 3
Audit 4
References 4

Introduction

This Guideline supports the safe care of women having a birth prior to 37 weeks gestation.

Aims

To reduce the risks of pre term birth for the baby detailing treatment to prevent or delay early birth.

Objectives

To support safe practice in the delivery of care to women who are having a birth prior to 37 weeks.

Scope

The guideline applies to all clinicians working within the maternity services.

Roles and Responsibilities

The Clinical effectiveness forum will ensure that the guideline is available on the intranet and make staff aware of the guideline

Maternity staff are expected to follow the guideline in accordance with clinical requirements

Training

Staff are expected to access appropriate training where provided

Training needs will be identified through appraisal and clinical supervision

Standards for Health Services Wales

This guideline cross references to:
Standard 7: Safe & clinically Effective Care

Equality

This guideline has undergone a equality impact assessment

Audit

This guideline will be audited by the risk management process.

References

1. 1.National Institute for Health and Care Excellence. Preterm labour and birth. NICE guideline NG25. London: NICE; 2015 [https://www.nice.org.uk/guidance/ng25].

2. Royal College of Obstetricians and Gynaecologists. Magnesium sulphate to prevent cerebral palsy following preterm birth. Scientific Impact Paper no. 29. London: RCOG; 2011 [https://www.rcog.org.uk/en/guidelines-research-services/guidelines/sip29/].

3. All Wales Preterm Birth Guidance - Prevention, Diagnosis and Management including the Diagnosis and Management of Preterm Labour (PTL) and Preterm Prelabour Rupture of Membranes (PPROM) – June 2023.

4. RCOG Green Top guideline number 75. Cervical Cerclage. Feb 2022

Pre term labour and birth

Incidence of preterm in UK is 7.3% of the livebirths

Offer information and support to women regarding the baby survival short term and long-term consequences

Involve Neonatologists

High risk factors:

- History of previous preterm birth or second trimester loss (16–34 weeks' gestation)
- Previous preterm prelabour rupture of membranes (PPROM) less than 34 weeks
- Previous use of cerclage
- Known uterine variant
- Intrauterine adhesions
- History of trachelectomy.

Intermediate risk factors:

- History of a previous full dilatation C-section
- significant cervical excisional surgery i.e. large loop excision of the transformation zone (LLETZ) with an excision depth greater than 1.5 cm, more than one procedure or a cone biopsy.

Refer to Consultant Clinic by 12-14 weeks where possible, or with the dating scan whichever is sooner

Consider a single transvaginal cervix scan no later than 16–22 weeks as a minimum or start prophylactic vaginal progesterone 200 mg or 400 mg once daily P/V till 34 weeks.

If women have had a TERM DELIVERY after the risk factor event, the risk of preterm birth is LOW and there is no need for cervical length screening.

Prophylactic Vaginal progesterone or prophylactic Cervical Cerclage

Offer prophylactic Vaginal progesterone or prophylactic Cervical Cerclage as per NICE guidelines to women who have both

- H/O spontaneous preterm birth before 34 weeks or pregnancy loss from 16 weeks onwards
- Results from transvaginal scan between 16 and 24 weeks of pregnancy that show a cervical length of 25 mm or less
- Discuss the options with the women and make joint decision

Prophylactic Progesterone

Offer prophylactic progesterone to women who have either

- H/O spontaneous preterm birth before 34 weeks or pregnancy loss from 16 weeks onwards

  or

- Results from transvaginal scan between 16 and 24 weeks of pregnancy that show a cervical length of 25 mm or less

Progesterone should be offered to women with no risk factors for PTB in whom a short cervix is incidentally found on TVUSS, or for women who chose progesterone rather than cervical cerclage.

Suggested regimen: Vaginal progesterone 200- 400 milligrams once daily from 16 weeks to 34 weeks.

Inform women that this is an **off-label use of progesterone**.

Prophylactic Cervical cerclage

- Consider Prophylactic cervical cerclage to women when results of transvaginal scan between 16 and 24 weeks of pregnancy that show a cervical length of 25 mm or less

  And who had either

- Preterm prelabour rupture of membranes PPROM in previous pregnancy

  Or

- History of cervical trauma

If prophylactic cervical cerclage done, ensure a plan is made and documented for removal of the suture.

Rescue cervical cerclage

Rescue cervical cerclage may be considered, after discussion with the Consultant Obstetrician and Neonatologist, for women between 16 to 27+6 weeks of gestation with a dilated cervix (<4cm) and unruptured fetal membranes.

If emergency cerclage used, ensure a plan is made and documented for removal of the suture.

Do not offer cervical cerclage if :-

Signs of infection
Active vaginal bleeding
Uterine contractions

Diagnosing pre term labour for women with intact membranes

1) Clinical history taking
2) Speculum examination

Offer a speculum examination to assess for any vaginal loss and cervical dilatation (do not use any lubricating gel if you plan to take a sample for fFN). Take a sample for fetal fibronectin testing and microbiology high vaginal swab
A digital vaginal examination may be performed if the cervical dilatation cannot be assessed on speculum examination but avoid repeat digital examinations.
Take the fFN sample before performing a digital examination and discard the sample if she is then found to be ≥3cm dilated.

Fetal Fibronectin

Criteria –

- Signs and symptoms of preterm labour between 24 weeks and 34+6 weeks of gestation
- Intact membranes
- Cervix < 3cm dilated

Contraindications –

- Ruptured membranes

- Moderate/severe vaginal bleeding (may give false positive result).
- Sexual intercourse or vaginal examination within the last 24 hours

QUiPP App

This tool is used to predict spontaneous preterm birth will generate an individualised risk based on the patient's history, cervical length (if available) and fFN result. This allows for more tailored counselling and if a risk score of >5%,high risk of preterm labour within one week, hence offer active management of preterm labour.

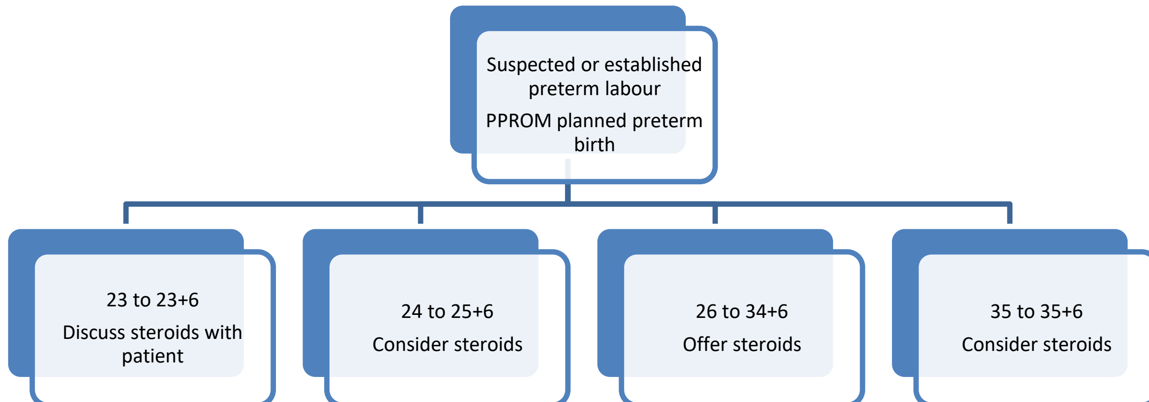
Transvaginal cervical length scanning

If a patient is not suitable for fetal fibronectin testing but has symptoms suggestive of preterm birth, consider cervical length measurement. This should be performed by an obstetrician or sonographer who is trained and experienced in transcervical scanning. If cervical length <15mm, active management of PTB should be considered.

Tocolysis

Consider or offer nifedipine for tocolysis to women with intact membranes and suspected preterm labour between 24 to 33+6 weeks of gestation after considering the contraindications of nifedipine.
Nifedipine dose: Oral Nifedipine tablet 10mg on four occasions 20 minutes apart (i.e. – 10mg orally at 0, 20, 40 and 60 minutes). OR, at 20-minute intervals until contractions stop, up to a maximum of 4 doses.
NB: Short acting nifedipine is associated with a sudden drop in blood pressure. Maternal observations should be done every 15 minutes throughout loading dose, and continuous CTG should be applied.
Maintenance: Oral Nifedipine modified release (MR) tablet 20mg, given 4 hours after loading dose. This is followed by Nifedipine MR 20mg 8 hourly for 48 hours or until a clinician directs for it to be stopped.
For low BMI patients- the loading and the maintenance dose is reduced to 10 mg
Atosiban is used as second line if Nifedipine is contraindicated (severe maternal cardiopulmonary compromise) or if there is an intolerance to Nifedipine.

Maternal corticosteroids



Betamethasone 12mg IM, two doses 24 hours apart. Alternatively, Dexamethasone is given 6mg IM, for four doses, 12 hours apart.

Repeat steroids may be considered in a select high risk group of women, considering the possible impact on fetal growth.

Consider a single repeat course of maternal corticosteroids for women less than 34+0 weeks of pregnancy who: have already had a course of corticosteroids when this was more than 7 days ago and are at very high risk of giving birth in the next 48 hours.

Do not give more than 2 courses of maternal corticosteroids for preterm birth

Magnesium sulphate for neuroprotection

Offer magnesium sulphate for neuroprotection of baby to women between 24 to 29+6 weeks who are in established preterm labour or having a planned preterm birth in 24 hours.

It could be considered for women who are in established or planned preterm birth in 24 hours for fetal neuroprotection of the baby between 30 to 33+6 weeks of gestation.

Give 4gm IV bolus of magnesium sulphate over 15 minutes and 1 g per hour until birth or for 24 hours (whichever is sooner)

Monitor for clinical signs of magnesium toxicity at least every 4 hours by recording pulse ,BP, respiratory rate and deep tendon reflexes. Be cautious when using in conjunction with Nifedepine

In women between 22-23+6 weeks of gestation presenting with preterm labour or PPROM, after discussion with neonatal consultant, senior Obstetrician and parents, magnesium sulphate should be considered if the decision is for active care.

Fetal Monitoring

Involve a senior obstetrician in discussion about whether and how to monitor fetal heart rate for women who are between 23 to 25+6 weeks pregnant.

A normal CTG trace is reassuring and indicates that the baby is coping with labour but an abnormal trace does not necessarily indicate fetal hypoxia or acidosis.

Fetal scalp electrode

Do not use a fetal scalp electrode for fetal heart rate monitoring if the woman is less than 34 weeks unless all the following apply

- not possible to monitor the heart rate using CTG or intermittent auscultation,
- it has been discussed with senior obstetrician,
- benefits are likely to outweigh the potential risks
- the alternative of no monitoring or USS has been discussed with her and is not acceptable to her.

Between 34 to 36+6 weeks discuss the use of fetal scalp electrode if not possible to monitor the fetal heart rate using CTG or Intermittent Auscultation.

Mode of birth

Highlight the difficulties of a caesarean section in <34 weeks gestation and the likelihood of a vertical uterine incision and the implication of this for future pregnancies.

Timing of cord clamping

If the baby is stable, wait for at least 60 seconds before clamping the cord unless there are specific maternal or fetal conditions that need earlier clamping.
Position the baby at or below the level of the placenta before clamping the cord
Discuss the use of life start machine with the neonates and make arrangements but do not delay delivery for this.

Placental Histopathology
Placental histology should be requested for all deliveries <34 weeks gestation and these examinations should be undertaken by a specialist perinatal pathologist to assess for signs of infection/inflammation and ischaemia/infarction.

Postnatal
For all women who had a preterm birth at <34 weeks gestation, offer postnatal debrief at 6/52.

Extreme preterm Birth

A multi-disciplinary team discussion involving at least one senior obstetrician and neonatologist/paediatrician should be held for all foetuses at risk of extreme preterm delivery between 22+0 and 26+6 weeks. The discussions would allow for risk stratification and seek parents' wishes and values. There should be clear documentation regarding plan of care – survival focused management or comfort care. If time allows, at least two separate discussions should take place. Any agreed upon management plan needs to be reviewed regularly and may need to be revised as the clinical situation changes.

References

1. National Institute for Health and Care Excellence. Preterm labour and birth. NICE guideline NG25. London: NICE; 2015 [https://www.nice.org.uk/guidance/ng25].
2. Royal College of Obstetricians and Gynaecologists. Magnesium sulphate to prevent cerebral palsy following preterm birth. Scientific Impact Paper no. 29. London: RCOG; 2011 [https://www.rcog.org.uk/en/guidelines-research-services/guidelines/sip29/].
3. All Wales Preterm Birth Guidance - Prevention, Diagnosis and Management Including the Diagnosis and Management of Preterm Labour (PTL) and Preterm Prelabour Rupture of Membranes (PPROM) – June 2023
4. RCOG Green Top guideline number 75. Cervical Cerclage. Feb 2022