CLINICAL GUIDELINE

Preterm Labour Diagnosis, Management In Pregnancy

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

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Important Note:

The Intranet version of this document is the only version that is maintained.
Any printed copies should therefore be viewed as 'Uncontrolled' and as such, may not necessarily contain the latest updates and amendments.

Greater Glasgow & Clyde
Obstetric Guideline

Preterm Labour: Diagnosis and Management

(23+0 – 36+6 week's gestation)

This guideline has been updated regarding the NICE guideline (NG25) Preterm labour and birth published in 2015

Preterm labour is a major cause of perinatal morbidity and mortality. It is defined as labour at less than 37 completed weeks' gestation. Neonates delivering before 30 weeks' gestation are at significantly greater risk of complications of prematurity.

Proven interventions to improve neonatal outcome are:

1. Administration of antenatal steroids.
   There is evidence from meta-analysis of RCTs that maternally administered corticosteroids are of benefit to reduce neonatal mortality and morbidity when administered between 26 and 34 weeks' gestation.
2. Delivery of the neonate in a facility that can provide optimal neonatal support at the given gestational age at delivery.
3. Magnesium Sulphate has a benefit to reduce the risk of cerebral palsy in premature infants especially those delivered < 30 weeks' gestation.

The use of tocolytics does not significantly alter the long-term outcome of the pregnancy, but may temporarily suppress uterine action for 24-48 hours. It should be considered in only two situations:

1. When a first course of steroids is indicated to and likely to have a significant chance of enhancing fetal lung maturity (26 +0 – 33+6 weeks' gestation)
2. When transfer to another unit with adequate neonatal facilities is preferable following maternal and fetal risk assessment.

(RCOG Green Top Guideline 1b 2011, NICE NG25 2015)

Investigation and management

23+0 - 23+6 weeks' gestation

Survival data from the Epicure 2 study demonstrated that 15% of babies born at this gestation in 2006 survived from the onset of labour to the age of 3 years (63/416). Of those admitted to the neonatal care unit 29% survived (63/217). Of the survivors, approximately 50% survived without moderate or severe disability. More recent comparative data on the cohort that survive to admission to the neonate unit (approx 60-70%) suggests that in this group neonatal survival may be higher in 2013 than 2006 (36% survived to discharge) (Santhakumaran et al. 2017).

Therefore, as the prospect for survival without disability is at present limited, obstetric interventions are not routine in the management of these pregnancies, but should be carefully considered by a consultant obstetrician within the context of the individual pregnancy.

After accurately assessing gestation, a complete history including any predisposing risk factors

for preterm delivery should be obtained. A baseline assessment of maternal temperature, BP and pulse, assessment of uterine activity (palpation) and assessment of fetal viability by doptone or USS should be performed.

If history suggestive of preterm labour and regular uterine activity on abdominal palpation proceed to internal examination by registrar on call.

1. Perform a sterile speculum examination
2. If cervical dilatation cannot be assessed proceed to digital assessment of cervix length and dilatation.
3. If active diagnosis of preterm labour is suspected inform the consultant obstetrician on call, admit and discuss in the context of individual case, taking into account maternal and fetal wellbeing (including estimated fetal weight if available).
4. Early discussion between the neonatal/paediatric consultant and the parents, preferably with the obstetrician present, is recommended. The outcomes and issues should be clearly laid out. Decisions should be made as to whether 'comfort care only' or for assessment +/- instigation of neonatal intensive care is planned.
5. Discussion should include:
    - The possible benefits antenatal corticosteroids (efficacy data is lacking for deliveries < 26 weeks gestation, but potential benefit may be extrapolated that seen in deliveries >26 weeks' gestation). The influence of any fetal co-morbidities and of parental views should be included in the decision to administer antenatal steroids or not.
    - The option of fetal monitoring for viability but not intervention during labour by intermittent auscultation versus the equally valid option of no monitoring. Intermittent auscultation may however guide the neonatal team's resuscitation.
    - The role of MgSO4 at this gestational age is unproven. The decision to offer this should be made by the Obstetric consultant.
    - In-utero transfer from a center which does not have level 3 neonatal care is a complex decision and requires a risk assessment of both maternal and fetal risks by a consultant obstetrician, but should probably be considered if the parents opt for resuscitation +/- intensive care.
    - Caesarean section would not be recommended at this gestational age.

6. A clear obstetric and neonatal summary of discussions should be documented in the case record.

Costeloe KL et al. Short term outcomes after extreme premature birth in England: comparison of two birth cohorts in1995 and 2006 (the EPICure studies). BMJ 2012:345:e7976.

Santhakumaran s et al. Survival of very preterm infants admitted to neonatal care in England 2008-2014: time trends and regional variation Arch Dis Child Fetal Neonatal Ed 2017;0:F1-F8.

24+0-29+6 weeks' gestation

Neonates born at this gestation are at a higher risk of mortality and morbidity than those born > 30 weeks' gestation and have the most to gain from being prepared for preterm birth. On this basis, cost effectiveness analysis NICE (2015) suggests a low threshold for admission and obstetric intervention in these gestations if they present in suspected preterm labour.

After accurately assessing gestation, a complete history including any predisposing risk factors for preterm delivery should be obtained. A baseline assessment of maternal temperature, BP

and pulse, assessment of uterine activity (palpation) and an assessment of fetal viability should be performed by doptone, USS or CTG (see following notes on monitoring)

If history suggestive of preterm labour and regular uterine activity on abdominal palpation proceed to internal examination by registrar on call.

1. Perform a sterile speculum examination
2. If cervical dilatation cannot be assessed proceed to digital assessment of cervix length and dilatation.
3. If active diagnosis of preterm labour is suspected, admit.
4. Confirm presentation by Ultrasound.

Initiate obstetric interventions to potentially optimize neonatal outcome

1. Discuss and offer corticosteroids
2. Inform neonatal team: Consider the implication to maternal and fetal safety of in-utero transfer if a neonatal cot is not available
3. Carefully consider if tocolytics would be of benefit to allow time for steroid administration or in-utero transfer (delivery should not be imminent < 4 hours).
4. Consider the role for Magnesium Sulphate for neonatal neuroprotection.
   NOTE: Tocolytics and Magnesium Sulphate are not indicated concurrently and should not be prescribed together. Tocolysis should only be given when reasonable chance of suppressing labour, Magnesium Sulphate is indicated when labour is advanced and unlikely to be influenced by tocolysis. See notes on both interventions. In spontaneous preterm labour the chance of delivery within 4 hours will direct the best choice of these interventions.
5. Magnesium Sulphate should not be given out-with a labour ward / critical care unit setting. Its use requires intensive maternal monitoring. Magnesium Sulphate is absolutely contraindicated for in-utero transfer.
6. Mode of delivery for the very preterm breech is a difficult decision with lack of evidence to guide practice. Each case should have the maternal and fetal risks of vaginal versus CS considered by a consultant obstetrician. CS is not routinely indicated <26 weeks' gestation (NICE 2015)

Fetal Monitoring

Involve a senior obstetrician in discussions about whether and how to monitor fetal heart rate for women between 23+0 and 25+6 weeks gestation.

Explain the options of monitoring to the parents being aware that:

- There is limited evidence about specific features to suggest hypoxia or acidosis in preterm fetuses.
- There is absence of evidence that CTG improves outcomes of preterm labour for the woman or the baby compared to intermittent auscultation.
- A normal CTG may be reassuring but an abnormal trace does not necessarily indicate fetal hypoxia or acidosis.

Offer women in established preterm labour (>25+6 weeks gestation) but no other risk factors (guidance similar to that for term pregnancies) a choice of fetal heart rate monitoring using either:

- CTG
- Intermittent monitoring

Fetal scalp electrodes and Fetal Blood Sampling are contraindicated at this gestation.

30+0-33+6 weeks' gestation

After accurately assessing gestation, a complete history including any predisposing risk factors for preterm delivery should be obtained. A baseline assessment of maternal temperature, BP and pulse, assessment of uterine activity (palpation) and assessment of fetal wellbeing by CTG should be performed. Presentation should be confirmed by ultrasound assessment.

If history suggestive of preterm labour and regular uterine activity on abdominal palpation proceed to internal examination by registrar on call.

1. Perform a sterile speculum examination with sterile water as a lubricant (avoid aquagel and hibitane).
   If the cervix is not obviously dilated on inspection obtain swab of vaginal (not cervical) secretions from the posterior vaginal fornix for bed-side assay of fetal fibronectin (FFN) if test is available within the unit.
2. Proceed to digital assessment of cervix length and dilatation.

If active diagnosis of preterm labour is supported, admit and initiate obstetric interventions:

1. Consider the need for antenatal corticosteroids. Discuss and offer as indicated.
2. Inform paediatric team and ensure neonatal cot space is available.

   If no neonatal cot space is available, consider the safety of intrauterine transfer. Discuss any proposed intrauterine transfers with the obstetric consultant on call and then the Perinatal Advisory Service.
3. Carefully consider if any benefit is likely from tocolytic therapy.
   Patients in advanced labour (cervix > 4 cm dilatation) are unlikely to benefit from tocolytic therapy and are not suitable for safe intrauterine transfer.

Magnesium Sulphate use within this gestational age range to reduce the risk of cerebral palsy is not supported by robust evidence (RCOG impact paper 2011, NICE 2015), and is therefore not recommended in this GG&C guidance, however NICE suggests consideration of its use. (There may therefore be consultant level decision for its use due to documented specific risks i.e. suspected fetal infection or other increased priori risk of neonatal neurological dysfunction, NNT assessment will have been considered).

If active diagnosis of preterm labour is not supported, consider other differential diagnoses and suitability for out-patient care.

If clinical uncertainty remains, consider observation and repeat abdominal and cervical assessment (but not repeat FFN test) within 2- 4 hours. Revisit differential diagnosis at that point. Interventions (including in-utero transfer) should not be performed until a working diagnosis can inform a management plan.

Fetal Monitoring

Explain the options and limitations of monitoring to the parents (as discussed in previous section).

Offer women in established preterm labour but no other risk factors (guidance similar to that for term pregnancies) a choice of fetal heart rate monitoring using either:

- CTG
- Intermittent monitoring

Fetal scalp electrodes should not be used unless discussed with the consultant obstetrician and all alternative methods (intermittent ultrasound, no monitoring, immediate birth) are not possible or acceptable to the woman.

34+0-36+6 weeks' gestation

After accurately assessing gestation, a complete history including any predisposing risk factors for preterm delivery should be obtained. A baseline assessment of maternal temperature, BP and pulse, assessment of uterine activity (palpation) and assessment of fetal wellbeing by CTG should be performed. Presentation should be confirmed by ultrasound assessment.

If history suggestive of preterm labour and regular uterine activity on abdominal palpation proceed to internal examination by registrar on call.

1. Perform a sterile speculum examination.
2. Proceed to digital assessment of cervix length and dilatation.

Do not perform a FFN test if gestation ≥ 34+0 weeks' gestation.

If active diagnosis of preterm labour is supported, admit and initiate obstetric interventions:

1. Consider the need for antenatal corticosteroids. The number of pregnancies needed to treat to prevent one case of RDS will be high at this gestation and it is reasonable not to initiate steroids. If delivery is likely < 35 weeks' gestation or by caesarean section steroids may be of more value particularly for short term outcomes (i.e. need for initial ventilatory support (NEJM 2016)). Discuss and offer as indicated.
2. Inform paediatric team. Neonatal cot availability should be discussed but maternal and fetal risk assessment would rarely support in-utero transfer at this gestation
3. Tocolysis and Magnesium Sulphate are contraindicated.

Gyamfi-Bannerman C et al Antenatal Steroids for women at risk of late preterm delivery. N Engl J Med 2016;373(14):1311-1320.

If active diagnosis of preterm labour is not supported, consider other differential diagnoses and suitability for out-patient care.

If clinical uncertainty remains, consider observation and repeat abdominal and cervical assessment (but not FFN test) within 2- 4 hours. Revisit differential diagnosis at that point. Interventions should not be performed until a working diagnosis can inform a management plan.

Fetal Monitoring

Explain the options and limitations of monitoring to the parents (as discussed in previous section).

Offer women in established preterm labour but no other risk factors (guidance similar to that for term pregnancies) a choice of fetal heart rate monitoring using either:

- CTG
- Intermittent monitoring

Discuss with the woman the possible use of fetal scalp electrode between 34+0 and 36+6 weeks of pregnancy if it is not possible to monitor by the methods above.

Fetal Fibronectin Testing (30+0 – 33+6 weeks' gestation)

A negative FFN test

Testing for the presence of Fetal fibronectin (FFN) in vaginal secretions between 24 and 34 weeks will help to differentiate this group of women who are likely not to deliver preterm. The value of the test is that it has a high negative predictive value (99% of women with a negative test will not deliver within 14 days of testing).

In this guideline as suggested by NICE its utilization between 30+0 and 33+6 weeks' gestation in pregnancies at prior low risk of preterm labour should aid avoidance of unnecessary admission and interventions.

A positive FFN test

The test has a high false positive value. Therefore, as little as 20% of women with a positive test will establish in preterm labour within 14 days. A positive result should be taken into consideration with the rest of the clinical findings to inform management.

*Contraindications to FFN testing

- Multiple pregnancy
- Gestations < 30+0 weeks and > 34+0 weeks *
- Vaginal bleeding
- PPROM
- Sexual intercourse in preceding 24 hours
- FFN swabs obtained from the cervix
- Use of artificial lubricants

FFN testing in these situations is not clinically useful or may result in false positive results.

*(Based purely on cost effectiveness analysis NICE Guidance 2015 a lower threshold for suspicion of preterm labour <30 weeks gestation than > 30weeks gestation. Therefore, at < 30 weeks' gestation a negative FFN is not considered a valuable tool to influence clinical suspicion and therefore NICE do not support FFN testing < 30 weeks' gestation).

Corticosteroid Regimen (24+0 – 36+6 weeks' gestation)

Betamethasone two doses of 12 mg IM given 24 hours apart
(or 12 hours apart if delivery anticipated within the 24 hours)
or
Dexamethasone 4 doses of 6mg IM given at 12 hourly intervals

Maximal benefit occurs in pregnancies that deliver 24 hours after and up to 7 days after administration of the second dose of antenatal corticosteroids. Steroid therapy has been shown to reduce the risk of neonatal death even if delivery occurs within the first 24 hours. A steroid course should be commenced even if delivery is anticipated with 24 hours.

NICE (2015) assessed evidence from meta-analysis of 14 RCTs and concluded that maternally administered corticosteroids are of benefit to reduce neonatal mortality (NNT = 24 to prevent one loss *on whole group analysis*) and morbidity when administered between 26 and 34 weeks' gestation. Any potential benefit to gestations delivering < 26 weeks or > 34 weeks' gestation is extrapolated from data in the 26 - 34 week cohort. Clinical effectiveness is not proven but inferred and NICE (2015) assess there is 'less strong' recommendation for treatment.

Maternally administered steroids were demonstrated to significantly reduce risk of:

- fetal and neonatal deaths for pregnancies delivering in the sub-categories' <32, <34 and <36 weeks gestation (NNT to prevent one loss = 7,9 and 14 respectively). A statistically significant effect was not demonstrated <28 or 30 weeks' gestation.
- Intraventricular haemorrhage (incidence and severity) was significantly reduced when steroids administered 26-34 weeks' gestation (NNT= 20). Subgroup analysis demonstrated a that there were fewer babies with IVH born < 28 weeks (NNT=4), < 32 weeks (NNT=12) and 34 weeks (NNT = 20). There was no significant effect of treatment in the < 30 weeks and < 36 week subgroup).
- The need for mechanical ventilation (NNT = 18) and of neonatal sepsis (NNT = 28).

Antenatal steroids did not a significant effect on chronic lung disease or neurodevelopment. They have not been shown to significantly adversely affect maternal health.

Repeat courses of steroids are not recommended.

Concerns regarding possible adverse effects from maternal administration of repeated doses of corticosteroids have been raised. (RCOG Green-top Guideline 7, 2010).

NICE (2015) assessed that there was a lack of significant benefit to pregnancies treated with repeat courses of corticosteroids compared to those that were not (chronic lung disease, intraventricular haemorrhage of any grade, periventricular leukomalacia, early systemic neonatal infection, birthweight adjusted for gestational age or major neurosensory disability in early childhood) and was concerned some studies were terminated early on the basis of possible harm.

The only significant reported benefit of repeated courses of corticosteroids compared with a single course was a reduction in the need for mechanical ventilation (low quality data).
NICE conclude that repeat doses of steroids are not recommended but do not rule out the judicious use of repeat courses of corticosteroids where clinical judgement suggests potential benefit may outweigh the lack of clear evidence of harm. Decisions should be based upon

gestation, likelihood of imminent birth and time period since the last course of steroids.

Tocolysis

There is no clear evidence that tocolytic drugs improve neonatal outcomes and therefore it is reasonable not to use them.

Tocolytic drugs are contraindicated when delayed delivery may have adverse effects on maternal health or may keep the fetus in a potentially hostile environment.

Contraindications to Tocolytics include:

Intrauterine infection/ maternal pyrexia	Fetal death or lethal abnormality
Maternal condition requiring delivery	Abruption/vaginal bleeding
Advanced gestation (>34 weeks)	Suspected fetal compromise
Ruptured membranes	

Following discussion with the on call obstetric consultant, if tocolysis is deemed necessary then the agent of choice is Nifedipine

Nifedipine

Dose: Nifedipine Retard 20 mg TID x 48 hrs.

Side effects: hypotension, tachycardia, headache, nausea, flushes

Contraindications: allergy, severe aortic stenosis, cardiogenic shock.

Caution: concurrent administration of Magnesium Sulphate.

Magnesium Sulphate for Prevention of Cerebral Palsy in Preterm Delivery

Preterm delivery is a known risk factor for cerebral palsy. The rate of cerebral palsy in surviving neonates is estimated to be 14.6% at 22-27 weeks' gestation, 6.2% at 28-31 weeks' gestation and 0.7% at 32-26 weeks gestation. When administered within 24 hours of birth, the use of magnesium Sulphate has been shown to reduce the risk of cerebral palsy by about 30% in babies born before 30 weeks' gestation. This reduction in risk equates to a reduction of one case of cerebral palsy per 46 pregnancies treated with Magnesium Sulphate (Number Needed to Treat, NNT). The NNT to reduce the risk of cerebral palsy for more advanced gestations is significantly higher. The NNT to cause maternal side effects is 2. The NNT to cause a magnitude of maternal hypotension or tachycardia requiring cessation of therapy is 30. (NICE 2015, Queensland Guidance 2014)

The effect of Magnesium Sulphate is likely to be relatively acute.

-due to its direct occupancy of calcium channels

-animal studies demonstrate raised magnesium levels within the fetal brain within 2 hours of maternal administration

Magnesium Sulphate should be offered to all women < 30 weeks' gestation where delivery is planned or expected within 24 hours.

For planned delivery commence infusion as close to 4 hours before delivery as practical.
For unplanned situations, ideally at least 4 hours of magnesium should be given but treatment should not be withheld if delivery is anticipated before this.

If tocolysis has been commenced but onward progression of labour continues discontinue tocolysis (and score off from Drug Kardex) and consider the use of Magnesium Sulphate. Careful assessment of maternal BP should be observed if Nifedipine has been given recently but there is some evidence that such practice does not compromise maternal safety. Contraindications to both drugs must be observed.

If there is maternal and/or fetal compromise delivery should not be delayed to allow administration of magnesium.
Multiple pregnancies should receive the same dose and treatment.
The resident anesthetic and paediatric medical staff should be aware of the decision to give Magnesium Sulphate.

Contraindications: allergy, severe aortic stenosis, cardiogenic shock.

Dose (same as severe pre-eclampsia) 4g IV loading

dose
1g/hour IV maintenance infusion for up to 24 hours
The infusion should be stopped after delivery or 24 hours, whichever is first. Repeat therapy in women who remain undelivered but still meet criteria is a consultant decision, as there is a paucity of evidence to guide practice.

Magnesium Sulphate: Loading Dose

(by hand):
4 g IV over 5 minutes
(Add 4 g (8 mls of 50%) Magnesium Sulphate to 12 mls Sodium chloride 0.9%)

Magnesium Sulphate: Maintenance Infusion Dose:

IV infusion 1 g Magnesium Sulphate per hour (5 mls per hour via syringe driver)
(10 g (20 mls of 50%) Magnesium Sulphate made up to 50 mls by adding to 30 mls Sodium chloride 0.9% in a 60 ml luer lock syringe)

Infusion is maintained at 1 gr/hr until delivery or 24 hours provided: Respiratory rate > 14 per minute
Urine output > 25mls/hour, and
Patellar reflexes are present (use arm reflexes if regional anesthesia)

Magnesium Sulphate toxicity and management:

Note: Although case reports have described neuromuscular blockade with concomitant use of Magnesium Sulphate and Nifedipine or other calcium channel blockers, a controlled study and synthesis of the literature failed to demonstrate an increased risk. (J Obstet Gynaecol Can 2007;29(Suppl 4):S1-S58).
Magee LA et al. Therapy with both magnesium sulphate and nifedipine does not increase the risk of serious magnesium related side effects in women with pre-eclampsia Am J Obstet Gynecol 2005; 193 (1): 153-63.

Potential Obstetrical Adverse

Side effects include respiratory depression, hypotension, vomiting and tachycardia. Hourly reflexes, observations (including O2 saturations and respiratory rate) and monitoring of urine output should be performed and documented.
Calcium gluconate (10mls of 10%) should be available if required to counter the effects of magnesium toxicity.

Clinical Features	Mg level	Action
Loss of Patellar reflexes Weakness Nausea, Flushing Double vision Slurred speech Somnolence	circa 5 mmol/l	STOP INFUSION GIVE ANTIDOTE 10 ml of 10% Calcium Gluconate (1gram) Slow IV inject over 10 mins. CHECK Magnesium level. Inform Obstetric Anaesthetist.
Muscle Paralysis	circa 6-7.5 mmol/l	STOP INFUSION GIVE ANTIDOTE AS ABOVE Inform Obstetric Anaesthetist
Respiratory Arrest Cardiac Arrest	circa 12 mmol/l	STOP INFUSION INSTITUTE CPR 2222 CALL Obstetric and cardiac arrest team INTUBATE AND VENTILATE GIVE ANTIDOTE AS ABOVE CHECK Magnesium level

Adapted from "Antenatal Magnesium Sulphate Prior to Preterm Birth for Neuroprotection of the Fetus, Infant and Child" – National Clinical Practice Guideline from Australian Research Centre for Health of women & Babies, University of Adelaide.

Summary guidance on the management of suspected preterm labour (23+0 – 36+6 weeks' gestation)

Intervention	Gestational age at presentation of suspected preterm labour												
	23+0 -23+6		24+0 -29+6			30+0 – 33+6 (examine prepared for FFN testing)					34+0- 36+6		
	Cx < 2 cm	Cx ≥ 2 cm	Cx < 2 cm	Cx 2-4 cm	Cx >4 cm	Cx <2 cm			Cx 2-4 cm	Cx >4 cm	Cx <2 cm	CX 2-4 cm	CX > 4cm
FFN testing	NI	NI	NR	NI	NI	positive	negative	No test	NI	NI	NI	NI	NI
Steroids	Discuss explaining individual context		Consider	Initiate	Initiate	Consider	Not routine	consider	Initiate	Initiate	Not routine	consider	consider
Tocolysis	NI	NI	consider	consider	NI	consider	NI	consider	consider	consider	NI	NI	NI
In-utero transfer	Consultant decision		consider	consider	CI	consider	NI	consider	consider	CI	NI	NI	CI
Magnesium Sulphate	Consultant decision	Consultant decision	consider	Consider vs tocolysis if no CI. Stop any tocolysis	Initiate if no CI	NI	NI	NI	NR	NR	NI	NI	NI
GBS prophylaxis			See current GGC Guidance										
Fetal monitoring	Discuss no proven benefit – consider intermittent monitoring		If < 26 weeks' gestation intermitted auscultation or no monitoring reasonable options. If ≥ 26 weeks intermittent monitoring or CTG reasonable options			CTG monitoring reasonable					CTG monitoring reasonable		
Mode of delivery	Vaginal delivery		Vaginal delivery reasonable esp. < 26 weeks. CS may be indicated by concerns raised by fetal monitoring. CS may be indicated by concerns in <u>active</u> labour (Cx > 4cm) re presentation/gestation or POHx			CS may be indicated by concerns raised by fetal monitoring. CS may be indicated in <u>active</u> labour (CX > 4cm) if concerns arising from presentation or past obstetric history.							

NI = Not Indicated
CI = Contra Indicated
NR = Not Routine

Key bbbReferences:
Magnesium Sulphate to prevent cerebral palsy following preterm birth. RCOG scientific Impact Paper No 29. (2011)
Preterm labour and Birth. NICE guideline (2015)
Clinical Guideline: Preterm labour and birth – Queensland Health MN14.6-V8. R19 (2014)
Preterm labour, Tocolytic Drugs (Green-top Guideline no 1B) RCOG (2011)
Antenatal steroids to reduce neonatal morbidity (Green-top Guideline no &) RCOG (2011).

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