

ROYAL HOSPITAL FOR WOMEN

LOCAL OPERATING PROCEDURE

CLINICAL POLICIES, PROCEDURES & GUIDELINES

Approved by Quality & Patient Safety Committee
17 April 2014

PRETERM LABOUR – DIAGNOSIS AND MANAGEMENT

This LOP is developed to guide clinical practice at the Royal Hospital for Women. Individual patient circumstances may mean that practice diverges from this LOP.

1. AIM

- Diagnosis of preterm labour
- Appropriate management of preterm labour in order to optimise neonatal outcomes

2. PATIENT

- Woman with suspected preterm labour ≥ 24 weeks

3. STAFF

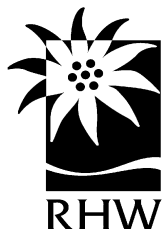
- Registered Midwives
- Student Midwives
- Medical staff

4. EQUIPMENT

- Cervical protein test, eg Actim Partus

5. CLINICAL PRACTICE

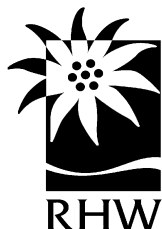
- Perform maternal and fetal assessment including a CTG as per ACMI guideline with specific attention to uterine activity over a period of 15 minutes
- Confirm and document the estimated due date, clearly outlining method of calculation
- Request Medical Officer to review
- Consider screening for proteins in cervical secretions (Actim Partus)
- Perform speculum examination by a medical officer to ascertain cervical change, vaginal discharge presence of ruptured membranes and obtain vaginal swab
- Perform digital vaginal examination of cervix if active labour is suspected and there are no contraindications
- Insert IV cannula and perform following blood tests :
 - Full Blood count
 - Group and Hold
- Collect mid-stream urine specimen, perform urinalysis and send for culture
- Recommend corticosteroids for fetal lung maturation if gestation less than 34 weeks and active neonatal resuscitation is planned
- Consider oral Nifedipine for tocolysis if no contraindications and true preterm labour suspected
- Recommend IV magnesium sulphate for neuro-protection if less than 30 weeks gestation, and active resuscitation is planned, and woman is confirmed to be in active labour
- Administer IV antibiotics if woman is in active labour, if woman GBS positive or GBS status unknown. A negative GBS screen is considered valid for 5 weeks.
- Notify Newborn Care Centre of admission, organise consultation from paediatrician / Newborn Care nurse and where appropriate organise orientation to Newborn Care
- Perform bedside ultrasound in delivery suite to confirm presentation on admission
- Request ultrasound for estimated fetal weight, fetal wellbeing and presentation.
- Transfer the woman following initial assessment to the Antenatal Ward if not in active labour

**PRETERM LABOUR – DIAGNOSIS AND MANAGEMENT cont'd****6. DOCUMENTATION**

- Integrated Clinical Notes
- Medication Chart
- Observation Chart
- ObstetriX
- Partogram
- Clinical Pathways
- Antenatal Yellow Card

7. EDUCATIONAL NOTES

- Preterm labour maybe difficult to diagnose and the entire clinical picture needs reviewing, including any risk factors e.g. previous preterm birth, cervical surgery, multiple pregnancy, polyhydramnios. If there is clinical uncertainty, especially in the presence of risk factors, then admission should be considered
- The diagnosis of suspected preterm labour on clinical grounds should include uterine contractions that are painful, palpable, last more than 30 seconds and occur with a frequency of at least two in every 10 minutes. There may or may not be evidence of cervical change
- Suppression of preterm labour may be contraindicated in women with maternal or fetal compromise such as :
 - Severe pre-eclampsia
 - Placental abruption / antepartum haemorrhage
 - Sepsis
- Threatened premature labour only accounts for 6 – 10% of births but is responsible for 75% of neonatal morbidity and mortality
- Beta agonists and calcium channel blockers have been shown to prolong gestation for 24 – 48 hours but do not decrease neonatal morbidity or mortality
- Cervical length <25mm at 24 weeks gestation represents an increased risk of spontaneous preterm birth especially in primigravida women.
- The specificity and negative predictive value for early preterm delivery has been shown to be highest with a combined approach of fetal fibronectin and cervical length (CL) (93% and 82%, respectively) compared to fFN screening alone (85% and 85%) or CL screening alone (58% and 87%). Trans-vaginal length assessment (or translabial) may be considered if <32 weeks gestation, using a cut off of 20mm, as an alternative or addition to actim partus, if this may change a woman's clinical management (such as rural residence and early gestation) (5)
- Funnelling and dilatation of the cervix increase the likelihood of preterm birth but are poor predictors
- Negative Actim Partus is a strong predictor that preterm delivery is unlikely within the next 7 – 14 days. Actim Partus is considered positive whenever two blue lines are present
- The incidence of serious adverse drug reactions in women receiving combined courses of tocolytics is 1.6 – 2.5%. There is no evidence that treatment with combined tocolytics is superior to single or sequential treatment
- Attempts at tocolysis are unlikely to be successful with advanced cervical dilatation, particularly in the presence of ruptured membranes
- There is no clear evidence that tocolytic drugs improve neonatal outcomes and therefore it is reasonable not to use them. However, tocolysis should be considered if the few days gained would be put to good use such as completing a course of corticosteroids or in utero transfer.
- Neonatal resuscitation is not usually offered less than 24 weeks gestation, however, may be performed on an individual basis after the discussion with the neonatal team

**PRETERM LABOUR – DIAGNOSIS AND MANAGEMENT cont'd****8. RELATED POLICIES / PROCEDURES / CLINICAL PRACTICE LOP**

- Preterm premature rupture of membranes (PPROM) – assessment and management guideline
- Actim prom: qualitative diagnosis of preterm premature rupture of membranes
- Nifedipine for tocolysis – protocol
- Midwifery Admission
- Estimating Due Date
- Policy directive : Maternity - Tocolytic agents for threatened preterm labour before 34 weeks gestation. PD2011- 025, 4/5/11. NSW Health
- Corticosteroids for women at risk of preterm birth or with a fetus at risk of respiratory distress – antenatal
- Neonatal resuscitation guidelines at delivery
- In utero transfers at 23 – 25 weeks gestation
- Magnesium sulphate prior to preterm birth for fetal neuroprotection
- Group B streptococcus (GBS) screening and prophylaxis
- Intrapartum fetal heart rate monitoring

9. REFERENCES

- 1 Higby K. & Suiter C.R. (1999) A risk benefit assessment of therapies for premature labour. Drug Safety. 21 (1) 35-36
- 2 Tocolysis for Women in Preterm Labour. RCOG Green top Guideline February 2011
- 3 Danti L et al. The combination of short cervical length and pHIGFBP-1 in the prediction of preterm delivery in symptomatic women. J. Matern Fetal Neonatal Med. (2011) Jan 19. Early Online, 1-6
- 4 CDC Prevention of perinatal Group B strep disease 2010 Vol59, NORRIO
- 5 DeFranco EA, Lewis DF, Odibo AO. Improving the screening accuracy for preterm labor: is the combination of fetal fibronectin and cervical length in symptomatic patients a useful predictor of preterm birth? A systematic review. Am J Obstet Gynecol 2013;208:233.e1-6.

REVISION & APPROVAL HISTORY

Reviewed and endorsed Maternity Services LOPs group 8/4/14

Approved Quality & Patient Safety Committee 18/4/13

Reviewed and endorsed Obstetrics LOPs group 9/4/13 : title changed 'Preterm Labour – Diagnosis and Management'

Reviewed and endorsed Obstetrics LOPs group November 2011 : title changed 'Preterm Labour Management' : Approved Quality & Patient Safety Committee 15/12/11

Titled 'Threatened Preterm Labour Suppression Guideline' : approved Quality Council 18/4/05

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