

Assessment and management of preterm labour (< 37 weeks)

Review History

- Medical, surgical, obstetric, social

Assess for signs and symptoms

- Pelvic pressure
- Lower abdominal cramping
- Lower back pain
- Vaginal loss—mucous, blood, fluid
- Regular uterine activity

Physical examination

- Vital signs
- Abdominal palpation
- Fetal surveillance—FHR, CTG
- Sterile speculum exam
 - Identify if ROM
 - Visualise cervix/membranes
 - High vaginal swab
 - Test for fFN
 - TVCL (if available)
- Low vaginal/anorectal GBS swab
- Cervical dilatation—if indicated
 - Sterile digital vaginal exam unless ROM, placenta praevia
- Ultrasound—if available
 - Fetal growth and wellbeing

Laboratory

- High vaginal swabs for MC&S
- Swab for GBS (vaginal/anorectal)
- Midstream urine for MC&S

Consider admission if:

- fFN > 50 ng/mL *or*
- Cervical dilation *or*
- Cervical change over 2–4 hours *or*
- ROM *or*
- Contractions regular and painful *or*
- Further observation or investigation indicated *or*
- Other maternal or fetal concerns

No

Admission indicated?

Yes

Admit

- Analgesia if required
- Clinical surveillance
- Fetal monitoring/continuous CTG
- Consult as required
- Plan care with the woman

Discharge

- Provide information re: signs and symptoms and returning for care
- Arrange follow-up as indicated

Consider as clinically appropriate

In-utero transfer

- Aim for in-utero transfer wherever possible
- If gestation < 28 weeks, accept a high level of risk for birth en-route (unless it puts mother's life at risk)
- Coordinate transfer via RSQ phone: 1300 799 127

Antenatal corticosteroids (< 35+0 weeks)

- Recommend course of betamethasone (2 doses)
 - 11.4 mg IM then 2nd dose in 24 hours
 - Consider 2nd dose at 12 hours if PTB likely within 24 hours
- If risk of PTB remains ongoing in 7 days (or more), consider repeat dose

Tocolysis

- Nifedipine 20 mg oral
- If contractions persist after 30 minutes repeat dose
- If contractions persist after further 30 minutes repeat dose
- Maintenance therapy 20 mg every 6 hours for 48 hours

Discuss with obstetrician

- If contraindications exist
- If other options required (indomethacin, salbutamol)

Antibiotics:

- If established labour (or imminent risk of PTB) give intrapartum GBS prophylaxis regardless of GBS status or membrane status
- If chorioamnionitis (membranes intact or ruptured)
 - Ampicillin (or amoxicillin) 2 g IV initial dose, then 1 g IV every 6 hours
 - Gentamicin 5 mg/kg IV daily
 - Metronidazole 500 mg IV every 12 hours
- If penicillin hypersensitivity and chorioamnionitis:
 - Lincomycin OR clindamycin 600 mg IV every 8 hours and
 - Gentamicin 5 mg/kg IV daily and
 - Metronidazole 500 mg IV every 12 hours
- If labour does not ensue (and no evidence of chorioamnionitis) and membranes intact then cease antibiotics
- If PPROM, refer to Queensland Clinical shortGuide: *PPROM and PROM*

Magnesium sulfate

- Recommend if gestational age less than 30+0 weeks if birth imminent (within 24 hrs)
- Consider if gestational age 30+0–33+6 weeks
- Labour established or birth imminent (within 24 hrs)
 - Loading dose: 4 g IV bolus over 15 minutes
 - Maintenance dose: 1 g/hour for 24 hours or until birth—whichever occurs first

Prepare for birth

- Recommend vaginal birth unless there are specific contraindications to vaginal birth or maternal conditions necessitating caesarean section

Management after threatened preterm labour

- Plan care according to clinical circumstances
 - Maternal and fetal assessments
 - Transfer back to referring hospital where feasible
 - Discharge if usual criteria met
 - Inform the woman, GP and usual care provider about recommendations for future care



CTG: Cardiotocograph, EOGBSD: early onset group B *Streptococcus* disease, fFN: Fetal fibronectin, FHR: Fetal heart rate, g: grams, GBS: Group B *Streptococcus*, GP: general physician, hrs: hours, IM: Intramuscular, IV: Intravenous, kg: kilogram, MC&S: microscopy, culture & sensitivity, mg: milligrams, PROM: Prelabour rupture of membranes, PPROM: Preterm prelabour rupture of membranes, PTB: Preterm birth, RSQ: Retrieval Services Queensland, ROM: Rupture of membranes, TVCL: Transvaginal cervical length, >: greater than, <: less than