UNIVERSITY HOSPITAL WISHAW
WOMEN'S SERVICES DIRECTORATE

NHS
Lanarkshire

Guideline for Preterm Prelabour Rupture of Membranes

Purpose:

1. The aim of this document is to provide guidance for the diagnosis and management of Preterm Prelabour Rupture of Membranes (PPROM). It has been developed based on NICE guideline 25: Preterm labour and birth, RCOG Greentop Guideline 73 (2019): Care of women presenting with suspected PPROM after 24 weeks., complementary local guidelines and local agreement.

Definition:

PPROM is defined as the spontaneous rupture of membranes prior to 37+0 without the onset of regular uterine contractions.

This complicates 2% of pregnancies but is associated with 40% of preterm deliveries – 50% of women will go into labour within 48hrs of PPROM and 70-90% within 7 days. Infection can be important as either a cause or consequence of PPROM.

Diagnosis

- History of reported vaginal loss noting timing, type, colour, and amount.
- Record temperature, pulse rate, blood pressure, and perform urine analysis
- Abdominal palpation noting:
  - symphysis fundal height
  - fetal lie and presentation
  - uterine tenderness, irritability or activity
- Perform speculum examination:
  - aseptic technique using sterile vaginal pack and medium long speculum
  - look for pooling liquor after the mother has adopted a left lateral or semi-recumbent position. If uncertain ask the woman to cough or perform a Valsalva manoeuvre.
  - If there is any doubt regarding whether liquor has been seen, then discuss with a senior obstetrician
  - Fetal Fibronectin should NOT be done if liquor is seen

Management if PPROM confirmed

- Obtain LVS and anorectal swab for GBS (single swab can be used in vagina then anorectum)
- Obtain HVS only if purulent discharge seen
- **Do not perform digital examination of cervix unless delivery is planned or imminent –** this increases risk of infection
- Check FBC and CRP
- Auscultate fetal heart rate if <27+6 weeks or perform CTG if >27+6 weeks
- Bedside USS to confirm presentation
- **If there is no evidence of chorioamnionitis,** commence antibiotics: Erythromycin 250mg PO qds for 10 days. *Antibiotic treatment following PPROM is effective at prolonging pregnancy and reducing maternal morbidity.* (Amoxicillin 500mg PO tid x10 days if erythromycin contraindicated)
- **Steroids:** 2 x doses of betamethasone 12mg IM 24hrs apart – reduced to 12hrs apart if suspicion of imminent delivery
    - Should be given from 24+0 – 33+6 weeks
    - Consider from 34+0 – 36+0 weeks – discuss with consultant if necessary
    - If 22+0 – 23+6 weeks please refer to extreme prematurity guideline and discuss with obstetric consultant and neonatal team
    - Caution in suspected chorioamnionitis or IDDM.
- Admit to AN ward for approximately 24hrs observation. Can consider discharge once steroids complete and 2 sets of normal FBC/CRPs obtained.
- Request formal USS to assess estimated fetal weight, presentation, placenta, liquor volume and dopplers.
- Ask neonatologist team to review and counsel
- There is ***no*** evidence of benefit from the use of tocolytics following PPROM

If there is evidence of infection or fetal compromise seek senior obstetric opinion, with a view to delivery

If evidence of maternal sepsis treat promptly in accordance with that guideline

Outpatient Management

If the above checks are reassuring the patient can be discharged home with Daycare Unit follow-up and advice. This is only appropriate if it is safe and practical, and the patient is in agreement.

Women with confirmed PPROM should be reviewed twice per week in the Daycare unit. The following should be reviewed:

- Well-being of woman, colour of liquor, any pain, fetal movements
- Observations including temperature (if HR >100bpm, temperature <36°c or >38°c, RR>20 or O2 sats <94% on/air then registrar review required).
- Examine abdomen for tenderness, which may be a sign of developing chorioamnionitis. Assessand fetal lie and presentation
- Check FBC/CRP
- Check fetal heart and if >27+6 weeks perform CTG

Perform fortnightly ultrasound scans for growth, LV and umbilical Doppler (unless concerns prompt more frequent monitoring)

If there are concerns regarding the above or there is suspicion of chorioamnionitis, then senior obstetric opinion should be sought.

Delivery

Timing of delivery is a consultant decision. In women with PPROM and no contraindication to continuing the pregnancy delivery should normally be planned at 37 weeks gestation.

In known GBS carriers, delivery may be expedited after 34 weeks.
Women should be offered intrapartum GBS antibiotic prophylaxis.

Other related guidelines:

- Guideline for the management of preterm labour
- Guideline for the management of GBS Intrapartum Antibiotic Prophylaxis
- Guideline for the management of Pre-labour rupture of membranes at term
- Sepsis in maternity patients: Recognition and immediate management
- Guideline relating to the birth of the extremely premature infant (22+0-26+6 weeks gestation)

References

2. **NICE guideline NG25**: Preterm Labour and birth (2015 updated 2019)
3. **RCOG Greentop Guideline 73 (2019)**: Care of women presenting with suspected PPROM after 24 weeks.
4. Kenyon S, Boulvain M, Neilson J. Antibiotics for preterm rupture of membranes (Review). **Cochrane Database of Systematic Reviews**. 2013 (12)

Originator:	Dr A Clark /Dr S Maharaj
Ratified (completed):	December 2021
Ratified by:	Maternity Clinical Effectiveness Group
Review date:	December 2024