

PROGESTERONE PREVENTION OF PRETERM LABOUR

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. OPTIMAL OUTCOMES

- Reduction in preterm labour and premature birth
- Prescription of progesterone
- Appropriate assessment of risk for preterm labour

2. PATIENT

- Pregnant woman with asymptomatic sonographic evidence of cervical shortening

3. STAFF

- Obstetric medical staff
- Ultrasonographer

4. EQUIPMENT

- Transvaginal ultrasound

5. CLINICAL PRACTICE

Asymptomatic women presenting for fetal morphology scan

- Consider transvaginal ultrasound assessment of cervical length at time of scan if the cervix appears shortened on trans abdominal scan
- Classify women with cervical length < 1.5cm at increased risk of preterm labour
- Assess other factors predisposing to preterm labour e.g. previous preterm birth, multiple gestation
- Consider prescription of progesterone pessaries
 - 200mg nocte
 - until 34 weeks gestation, delivery or prelabour rupture of membranes

Asymptomatic women with previous preterm birth

- Assess cervical length at fetal morphology scan with transvaginal ultrasound
- Consider measuring cervical length again at 24 weeks gestation if < 2.5cm at morphology scan
- Classify women with cervical length < 2.5cm, at either scan at increased risk of preterm labour
- Assess other factors predisposing to preterm labour e.g. multiple gestation
- Consider prescription of progesterone pessaries
 - 200mg nocte
 - until 34 weeks gestation, delivery or prelabour rupture of membranes

6. HAZARDS/SUB-OPTIMAL OUTCOMES

- Local irritation
- Inappropriate prescription of progesterone
- No reduction in preterm births

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ROYAL HOSPITAL FOR WOMEN

LOCAL OPERATING PROCEDURES

CLINICAL POLICIES, PROCEDURES & GUIDELINES MANUAL

Approved by

Patient Care Committee

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PROGESTERONE PREVENTION OF PRETERM LABOUR cont'd**7. DOCUMENTATION**

- Integrated notes are recorded including the risk of preterm birth, cervical length, dosing regimen and plan of ongoing management.

8. EDUCATIONAL NOTES

- Cervical shortening is the best single predictor for preterm birth, predicting 61.2% of cases. Combination of cervical length and a history of preterm birth predicts an additional 4.4% (65.6% total).
- Double-blinded randomised control trials have shown vaginal progesterone to significantly prevent the incidence of preterm birth in women with sonographic cervical shortening, including women with significant cervical shortening < 1.5cm.
- There is a trend towards a decrease in preterm birth in women with multiple gestations and cervical shortening
- Management of women on a progesterone regimen may be conducted on an outpatient's basis thus decreasing hospital admissions.
- Side-effects of vaginal progesterone are minor and include fatigue, nausea, headaches, vaginal irritation and increased discharge
- Other methods of preventing preterm labour have variable or no evidence as to efficacy e.g. bed rest, cervical cerclage, dietary supplements and antibiotics

9. RELATED POLICIES/ PROCEDURES/CLINICAL PRACTICE GUIDELINES

- Obesity in pregnancy
- Suppression of preterm labour

10. REFERENCES

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- (2) Fonseca E, Celik E, Parra M, Singh M, Nicolaides K. (2007). Progesterone and the risk of preterm birth among women with a short cervix. *NEJM* **357**:462-9
- (3) DeFranco E, O'Brien J, Adair C et al. (2007). Vaginal progesterone is associated with a decrease in risk for early preterm birth and improved neonatal outcome in women with a short cervix: a secondary analysis from a randomized, double-blind, placebo-controlled trial. *Ultrasound Obstet Gynecol*; **30**: 697–705
- (4) Iams J, Romero R, Culhane J, Goldenberg R. (2008). Primary, secondary, and tertiary interventions to reduce the morbidity and mortality of preterm birth. *Lancet* **371**: 164–75