INDUCTION OF LABOUR

DEFINITION
Artificially initiate uterine contractions leading to progressive dilatation and effacement of cervix and delivery of baby. Includes women with intact membranes and those with spontaneous rupture of membranes but who are not in labour.

Induction of labour should only be considered when vaginal delivery is felt to be appropriate and safe route of delivery

INDICATIONS
Prevention of prolonged pregnancy (term plus 10–14 days)
- Ultrasound at <20 weeks to confirm gestation and reduce need for induction for perceived post-term pregnancy
- In uncomplicated pregnancies, offer induction of labour between term plus 10–14 days
- Prolonged pregnancy >42 weeks
- Pre-labour ruptured of membranes (>37 weeks’ gestation) – see Pre-labour rupture of membranes guideline

Other (this list is not exhaustive)
- Diabetes
- Hypertension
- Growth restriction
- Antepartum haemorrhage (APH)
- Multiple pregnancy
- Cholestasis
- Previous stillbirth

Maternal request <41 weeks’ gestation
- Consider when compelling psychological or social reasons and the woman has a favourable cervix (Bishop’s score ≥5) and resources allow. Refer to a consultant clinic

PREGNANCY BEYOND 42 WEEKS’ GESTATION
- For women who choose to continue their pregnancy beyond 42 weeks, despite adequate explanation of the risks, advise to continually monitor fetal movement pattern, refer to obstetric consultant for plan of care
  - ultrasound estimation of maximum amniotic pool depth
  - umbilical artery Doppler study
  - electronic fetal monitoring (EFM)

METHODS OF INDUCTION OF LABOUR

Membrane sweeping

Not recommended if membranes have ruptured

- Before considering other methods for induction, offer membrane sweep according to local practice. This has been shown to increase the chances of labour starting naturally within 48 hr
- May be carried out in woman’s home, antenatal clinic or hospital

Midwife/doctor will:
- Provide full explanation of procedure
- Obtain and record consent
- Inform woman that membrane sweeping is not associated with an increase in maternal or neonatal infection but the procedure can result in increased levels of discomfort and bleeding
- Provide ‘Induction of labour’ leaflet (if available locally)
- Ensure woman has relevant contact telephone numbers
MEDICAL INDUCTION OF LABOUR

- In nulliparous or multiparous women with intact membranes with unfavourable cervix, use prostaglandin in preference to oxytocin.
- In nulliparous or multiparous women with ruptured membranes regardless of cervical status, prostaglandin or oxytocin are equally effective in induction of labour.

**Nulliparous women**

- Administer first dose prostaglandin 2 mg gel or 3 mg tablet or 10 mg propess pessary (times will be unit specific).
- Midwife will perform vaginal examination to assess state of cervix, whether contracting or not:
  - 6 hr after initial dose of gel or tablet.
  - 24 hr after initial dose of propess pessary.
- If, at next examination, artificial rupture of membranes (ARM) possible, perform regardless of Bishop’s score.
- If ARM not possible, administer second dose.

**Contraindications to induction of labour with prostaglandin**

- Previous caesarean section – see *Vaginal birth after caesarean section* guideline.
- Sensitivity to prostaglandins.
- History of hypertonic uterine contractions.
- Mechanical obstruction to delivery.
- Placenta praevia.
- Uncontrolled severe pre-eclampsia.
- History of existing inflammatory disease, unless adequate prior treatment instituted.
- Clinical suspicion or definite evidence of pre-existing fetal distress.
- Uncontrolled asthmatic.

**Relative contraindication**

- Predisposition to uterine rupture.

INDUCABILITY RATING (BISHOP’S SCORE)

For the purpose of this guideline Bishop’s score is used to assess cervical condition.

<table>
<thead>
<tr>
<th>Cervical feature</th>
<th>Pelvic score (circle appropriate number)</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>Total score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cervix position</td>
<td>Post Centre Anterior</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consistency</td>
<td>Firm Medium Soft</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Length (cm)</td>
<td>3 2 1</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Dilatation (cm)</td>
<td>0 1-2 3-4 5-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Station* to spines</td>
<td>-3 -2 -1</td>
<td></td>
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</tbody>
</table>

*Station is measured in cm relative to ischial spines.
Induction of labour 2013–15

Do not begin oxytocin infusion until 6 hr elapsed following administration of prostaglandin gel or tablets or 30 min after removal of propess pessary

ANTENATAL MANAGEMENT AND BOOKING OF PLANNED INDUCTION OF LABOUR (LOW RISK PREGNANCIES)

41 weeks
Community midwife/doctor will:
- Perform routine antenatal assessment, to include:
  - blood pressure
  - urine for proteinuria and glycosuria
  - measure fundal height and plot on growth chart
  - check position of baby
  - auscultate fetal heart and enquire about fetal activity
- Following explanation of the procedure, perform a membrane sweep and inform woman of findings
- Explain she may experience discomfort and the passing of a show and advise to contact maternity unit if she experiences bleeding, spontaneous rupture of membranes, abdominal pain or contraction
- Arrange admission date and time for induction at 40 weeks plus 10–14 days’ gestation
- Record all discussions indicating woman’s full understanding of her plan of care

ADMISSION AND MANAGEMENT OF PROSTAGLANDIN INDUCTION BY MIDWIFE (LOW RISK PREGNANCIES)
- Admit and perform general observations:
  - temperature
  - pulse
  - blood pressure
  - urinalysis
  - full antenatal examination
  - Obtain and review full history and carry out:
  - abdominal examination
  - fetal heart assessment
  - Give woman information regarding discomfort associated with procedure and pain relief options
- Explain there is no association with an increase in maternal or neonatal infection, bleeding, contractions and hyperstimulation
- Obtain consent
- Perform external EFM for 20 min to confirm fetal wellbeing
- Assess cervix using Bishop’s score and record findings
- Administer prostaglandin as per local guidance
- Provided initial monitoring on admission is within normal parameters, reassess fetal wellbeing:
  - EFM trace of 20 min once contractions have commenced
  - discontinue EFM after 20 min providing fetal heart remains within normal parameters
  - If at any time throughout the procedure, fetal heart rate is outside normal parameters, continue EFM and inform obstetric registrar/consultant
  - Encourage woman to mobilise freely and consider using non-pharmacological pain relief

Uterine hypercontractility with prostaglandin
- In the presence of abnormal fetal heart rate patterns and uterine hypercontractility, consider administration of subcutaneous terbutaline 250 microgram

ANTENATAL MANAGEMENT OF PLANNED INDUCTION OF LABOUR (HIGH RISK PREGNANCIES)
- Consultant obstetrician will be lead professional for all cases
- Obstetric medical staff will determine frequency of maternal and fetal observations required over and above those for low-risk pregnancy
Induction of labour 2013–15

- Discuss plan of care with all high risk women to decide timing and method of induction of labour
- Provide ‘Induction of labour’ information booklet (if available locally)
- Make decision to offer induction of labour
- Discuss timing and method of induction with woman
- Follow admission procedure in Low risk pregnancies

INDUCTION OF LABOUR WITH A PREVIOUS CAESAREAN SECTION

- The decision to induce a woman with a previous caesarean section should be made by an obstetric consultant after a vaginal examination. Vaginal examination is useful in determining method of induction
- Offer membrane sweeping
- Discuss risks of induction of labour with woman (e.g. failed induction/repeat caesarean section, scar rupture) and document in maternal healthcare record
- Risk of scar rupture is approximately doubled with ARM and oxytocin and increased five-fold with prostaglandin. If both oxytocin and prostaglandin are used the risk is increased 25 times. With a relative low Bishop’s score, consider proceeding directly to ARM or use of transcervical catheter induction
- Discuss and document individualised management plan using local proforma
- For women with a previous caesarean section undergoing induction, insert a cannula and take blood for FBC and group & save
- Monitor fetal wellbeing closely throughout
- EFM continuously from the onset of even mild contractions or any pain until delivery

FAILED INDUCTION OF LABOUR

- If amniotomy still impossible after 2 doses of prostaglandin gel or tablet or 24 hr propess use, induction of labour has failed
- Repeat prostaglandin gel or tablet or extend propess use for a further 6 hr
- If amniotomy still impossible, discuss with consultant obstetrician and arrange review
- Discuss the following options with the woman:
  - caesarean section
  - transcervical catheter induction (if used locally)
  - abandon process and repeat the process after an interval i.e. 24 hr