

## Induction of Labour

### Document Information

<b>Document Type:</b>	Guideline						
<b>Valid From:</b>	28/01/2016						
<b>Date of Review:</b>	28/01/2019						
<b>Appraisal Score:</b>	Domain	1	2	3	4	5	Overall
	Score (%)	90	75	76	80	75	80%
<b>Ratification Date &amp; Body:</b>	28/01/2016 Women's Clinical Governance Committee						
<b>Document Author(s):</b>	Consultant Obstetrician						
<b>Development Group Member(s):</b>	Consultant Midwife Delivery Suite Matron Consultant Midwife Delivery Suite Manager, Horton Consultant Gynaecologist and Obstetrician, Horton						
<b>Clinical Lead:</b>	Consultant Obstetrician						
<b>Associated OUH FT Documents:</b>	<a href="#">VBAC</a> <a href="#">cEFM –Intrapartum</a> <a href="#">SROM &gt;37/40</a> <a href="#">Pre-term SROM</a>						
<b>Document Replaces:</b>	Induction of Labour v 2.5, 10 <sup>th</sup> May 2018 Induction of Labour v 2.4, 17 <sup>th</sup> May 2017 Induction of Labour v 2.3, 6 <sup>th</sup> February 2017 Induction of Labour v 2.2, 21 <sup>st</sup> November 2016 Induction of Labour v 2.1, 29 <sup>th</sup> September 2016 Induction of Labour v 2.0, 6 <sup>th</sup> June 2016						
<b>Equality Impact Assessment:</b>	20/12/2012						

## Contents

Document Information.....	
Key Recommendations.....	
Background.....	
Aims.....	
Scope.....	
Definitions.....	
Executive Summary.....	
<i>Information and decision-making</i> .....	
<i>Induction of Labour for Prolonged Pregnancy</i> .....	
<i>Vaginal PGE 2</i> .....	
<i>Failed induction</i> .....	
Full Guideline.....	
Methods of Induction of labour.....	
Membrane Sweeping.....	
Medical Induction of Labour.....	
<i>Nulliparous women</i> .....	
<i>Multiparous women (2nd and 3rd baby)</i> .....	
<i>Following SROM (pre-labour rupture of membranes)</i> .....	
<i>Risk of Hyperstimulation (4th &amp; subsequent babies)</i> .....	
Contraindication to induction of labour with prostaglandin.....	
Antenatal Management and Booking of Planned Induction of Labour (Low risk pregnancies - 41 weeks appointment).....	
<i>Advice where woman wishes to continue pregnancy beyond 42 Weeks</i> .....	
Admission and management of prostaglandin induction of labour (Low risk pregnancies - 41+3 days to 42 weeks).....	
Process for when the Service is Unable to Induce Women Due to Workload.....	
Uterine hyper-contraction.....	
Antenatal management of planned induction of labour (High Risk Pregnancies).....	
Admission and management of prostaglandin induction of labour (high risk cases by medical staff).....	
<i>The ARM should also happen on Observation area or Delivery Suite where</i> .....	
Induction of labour in women with a previous caesarean section (NEW).....	
Failed induction of labour.....	
Appendix 1 – Induction of Labour at Term for Older Women.....	
<i>Key Recommendations</i> .....	
<i>Background</i> .....	
<i>Aims</i> .....	
Risk stratification.....	
<i>Lower Risk Group</i> .....	
<i>High Risk Group</i> .....	
<i>Conditions Often Managed by Offering Elective Induction</i> .....	
<i>Advice Where a Woman Wishes to Continue Pregnancy Beyond 41 Weeks</i> .....	
Appendix 2 – Induction of Labour using Prostaglandin Tablets.....	
<i>Primips Induction</i> .....	
<i>Multipips Induction without a uterine scar</i> .....	
<i>(NEW) Multipips Induction with a uterine scar</i> .....	
Appendix 3 – Audit and Monitoring.....	
Appendix 4 – Induction of Labour Chart.....	
Appendix 5 – Mode of Birth Clinic Referral Form.....	

## Key Recommendations

- Induction of labour may be offered when:
- Delivery is considered to be safer (for maternal or for fetal reasons) than continuing the pregnancy, taking into account the risks of the induction process itself on the mother and the risks of prematurity on the baby.
- Occasionally, delivery itself needs to be timed in order that the specialist resources can be made available for labour or the early neonatal period.
- Induction of labour should only be considered when vaginal delivery is felt to be an appropriate and safe mode of birth.
- When induction of labour is requested due to psychological issues or anxiety, consider referral to the Mode of Birth Clinic to discuss a birth plan to support spontaneous labour.
- Induction of labour is not a benign intervention and should only be offered for clear reasons.
- Induction for suspected fetal macrosomia or previous precipitate labour should not be routinely offered in the absence of other indications.
- Other than for prolonged pregnancy (see below), the decision to offer induction of labour should be agreed the consultant before making arrangements.

## Background

Induction of labour is a common intervention, occurring in up to 25% of pregnant women. Labour following induction is usually longer and perceived as more painful.

Women whose labours are induced are more likely to go on to require other forms of medical intervention, including emergency caesarean section.

Therefore care in the planning and appropriate use of induction is required.

## Aims

- Ensure induction is offered appropriately
- Offer stretch and sweep before induction at least 2-3 days before procedure starts if timing allows
- Ensure adequate resources available
- Ensure induction procedure happens expeditiously and safely

## Scope

This guideline is applicable to all women who require induction of labour within the Oxford University Hospitals NHS Foundation Trust. Induction of labour may be offered in the following circumstances (this list is not exhaustive):

- Prolonged Pregnancy (42 weeks)
- Pre-labour rupture of membranes at term/preterm pre-labour rupture of membranes. See [SROM at Term/Preterm Pre-labour Rupture of Membranes Guideline](#)
- Maternal Age

- Diabetes
- Hypertension/Pre eclampsia
- Cholestasis
- Previous Traumatic birth
- Antepartum Haemorrhage
- Intrauterine Death
- Fetal indications
- Intra-Uterine Growth Restriction
- Multiple pregnancy

## Definitions

Term	Definition
Induction of labour	<p>To artificially initiate uterine contractions. This leads to progressive dilatation, effacement of cervix and birth of the baby.</p> <p>Includes women with intact membranes and those with spontaneous rupture of membranes but not in labour.</p>
Bishop Score	<p>Bishop score is a pre-labour scoring system to assist in predicting whether induction of labour will be required.</p> <p>The total score is achieved by assessing the following five components on vaginal examination.</p> <ul style="list-style-type: none"> <li>• Cervical dilation</li> <li>• Cervical effacement</li> <li>• Cervical consistency</li> <li>• Cervical position</li> <li>• Fetal station</li> </ul>

## Executive Summary

### Information and decision-making

Women should be informed that most women will go into labour spontaneously by 42 weeks gestation.

At the 38 week antenatal visit, all women should be offered verbal information about the risks associated with pregnancies that last longer than 42 weeks, and their options. These include:

- Membrane sweeping
- Induction of labour around 42+0 weeks
- Expectant management

The doctor or midwife should explain the following points to women being offered induction of labour:

- The reasons for induction being offered.
- When, where and how induction could be carried out.
- The arrangements for support, pain relief (recognising that women are likely to find induced labour more painful than spontaneous labour) and the alternative options if the woman chooses not to have induction of labour.
- The risks and benefits of induction of labour in specific circumstances and the proposed induction methods.
- That induction may not be successful and what the woman's options would be should that be the case.

### Induction of Labour for Prolonged Pregnancy

Women with uncomplicated pregnancies should usually be offered induction of labour by 42+0 weeks to avoid the risks of prolonged pregnancy. The exact timing should take into account the woman's preferences and local circumstances.. All inductions are booked through the John Radcliffe delivery suite or via antenatal clinic. To give women every opportunity to go into labour spontaneously, once the gestation reaches 41 weeks, induction of labour will be planned to occur at 42 weeks.

### Vaginal PGE 2

Vaginal PGE2 is the preferred method of induction of labour, unless there are specific clinical reasons for not using it (in particular the risk of uterine hyper-stimulation). Within the OUH NHS Foundation Trust this is administered as a 2mg gel.

The recommended regimen is one cycle of vaginal PGE2 tablets or gel: one dose, followed by a second dose after 6 hours if labour is not established (up to a maximum of two doses).

**See appendix 2 for use of Prostaglandin tablets.**

### Failed induction

If induction fails, the doctor or midwife should discuss this with the woman and provide support. The woman's condition and the pregnancy in general should be fully reassessed, and fetal wellbeing should be assessed using electronic fetal monitoring. If induction fails, the subsequent management options include:

- A further attempt to induce labour (the timing should depend on the clinical situation and the woman's wishes)
- Abandoning the procedure
- Caesarean section

## Full Guideline

### Methods of Induction of labour

#### Membrane Sweeping

**This is not recommended when membranes are ruptured.**

Before considering other methods for induction, offer membrane sweep.

- To nulliparous women at 40 week antenatal visit
- To all women at 41 week antenatal visit
- To all women if assessing the cervix or if labour does not start spontaneously
- This has been shown to increase the chances of labour starting naturally within 48 hr. This may be carried out in woman's home, antenatal clinic or hospital.

#### Midwife or doctor will:

- Provide full explanation of procedure
  - Obtain and record verbal consent
  - Inform the 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 Trust 'Induction of labour' leaflet
- Ensure the woman has the relevant contact telephone numbers should she go into labour spontaneously

### Medical Induction of Labour

#### Nulliparous women (1<sup>st</sup> baby)

In nulliparous with intact membranes, use prostaglandin in preference to oxytocin, unless there is a significant risk of uterine hyper-stimulation due to intra-cervical prostaglandin administration (i.e. a fully effaced cervix and palpable membranes).

- Administer first dose prostaglandin 2 mg gel in the posterior fornix of the vagina.
- Midwife will perform vaginal examination 6 hours after initial dose of gel to assess state of cervix, whether the woman is contracting or not.
- If at next examination, artificial rupture of membranes (ARM) possible, perform regardless of Bishop's score.
- If ARM not possible, administer second dose prostaglandin 2 mg gel vaginally.

- Maximum dose of prostaglandin is 4 mg gel in 24 hours. If this is not adequate to allow ARM see 'Failed induction' section.

### Multiparous women (2nd and 3rd baby)

In multiparous women with intact membranes, use prostaglandin in preference to oxytocin unless there is a significant risk of uterine hyper-stimulation due to intra-cervical prostaglandin administration (i.e. a fully effaced cervix and palpable membranes)

- Administer first dose prostaglandin 2 mg gel vaginally in the posterior fornix of the vagina.
- Midwife will perform vaginal examination 6 hours after initial dose of gel to assess state of cervix, whether contracting or not.
- If at next examination, artificial rupture of membranes (ARM) possible, perform regardless of Bishop's score.
- If ARM not possible, discuss with the duty registrar re second dose of vaginal PGE2 gel.
- Maximum dose of prostaglandin is 4 mg gel in 24 hours. If this is not adequate to allow ARM see 'Failed induction' section.

### Following SROM (pre-labour rupture of membranes)

- Administer prostaglandin 2 mg gel vaginally, in the posterior fornix of the vagina.
- Midwife will perform vaginal examination 6 hours after initial dose of gel to assess state of cervix, whether contracting or not.
- Commence syntocinon infusion 6 hours after prostaglandin gel.
- Maximum dose of prostaglandin is 2mg gel.

### Risk of Hyperstimulation (4th & subsequent babies)

- If at first examination, artificial rupture of membranes (ARM) is possible, perform regardless of Bishop's score.
- Commence Syntocinon infusion as per protocol.
- If ARM not possible, consider 1 dose prostaglandin 2 mg gel vaginally after discussion with consultant.
- Maximum dose of prostaglandin is 2mg gel.

### Contraindication to induction of labour with prostaglandin

- Previous caesarean section – see '*Vaginal birth after caesarean section guideline*'
- Sensitivity to prostaglandins
- 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

## Antenatal Management and Booking of Planned Induction of Labour (Low risk pregnancies - 41 weeks appointment)

### The midwife 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 using Pinard stethoscope (or sonicaid) and enquire about fetal activity
- Following explanation of the procedure, perform a membrane sweep and inform woman of findings.
- Explain pregnancy so far and provide woman with opportunity for discussion and questions.
- Explain she may experience discomfort and the passing of a show. Advise to contact maternity unit if she experiences bleeding, spontaneous rupture of membranes, abdominal pain or contractions.
- Arrange admission date and time for induction at 42 weeks.
- Record all discussions in the woman's health records indicating her full understanding of her plan of care.

### Advice where woman wishes to continue pregnancy beyond 42 Weeks

For women who choose to continue their pregnancy beyond 42 weeks, despite adequate explanation of the risks, advise to continually monitor fetal movement pattern.

Identify as soon as possible in the antenatal period and make a referral to an Obstetric Consultant who will develop a plan of care. Arrange an appointment at the Day Assessment Unit for:

- Cardiography (CTG)

### Admission and management of prostaglandin induction of labour (Low risk pregnancies - 41+3 days to 42 weeks)

#### Admit and perform general observations:

- Temperature
- Pulse
- Blood pressure
- Urinalysis
- Full antenatal examination

These women should be given the first and second gel on the antenatal ward unless new complications arise during the induction process.

#### Obtain and review full history and carry out:

- Abdominal examination
- Fetal heart assessment using Pinard stethoscope or Sonicaid

#### Further Care:

- Give woman information regarding discomfort associated with procedure and pain relief options.
- Obtain verbal consent.
- Perform external [electronic fetal monitoring](#) (EFM) using a Cardiotocograph machine (CTG) until fetal wellbeing is confirmed (usually about 20 minutes).
- Assess cervix using Bishop's score and record findings.
- Administer prostaglandin vaginally.
- Advise woman to remain lying down (left / right lateral) for at least 30 minutes following prostaglandin administration, during which time EFM should continue.
- Provided initial monitoring is within normal parameters, discontinue CTG and revert to Intermittent Auscultation (IA).
- Reassess fetal wellbeing using cardiotocography (CTG) trace of 20 minutes once contractions have commenced.
- If normal, discontinue CTG after 20 min and revert to IA.
- If at any time throughout the procedure, fetal heart rate is outside normal parameters, continue CTG and inform obstetric registrar/consultant.
- As a minimum there should be an hourly review of fetal and maternal well-being, unless the woman is asleep or is mobilising off the ward. This should be documented on the Induction of Labour Sheet.
- Maternal Observations (temperature, pulse, B/P should be carried out daily prior to the onset of labour. These should be recorded on the MEOWS chart. Some women will require more frequent observations – in these cases an individual management should be documented in the intrapartum record.
- Encourage the woman to mobilise freely and consider using non-pharmacological pain relief.
- All women who are suitable for gel/pessary on the antenatal ward and are also suitable for ARM on the antenatal ward as long as the CPR measurement is  $>1$  at the 36 week USS; the fetal head is engaged in the pelvis and it is not a multiple pregnancy
- Use of oxytocin is an indication for continuous EFM.

### Process for when the Service is Unable to Induce Women Due to Workload

There will be rare occasions when accommodating the IOL work in a timely fashion may be challenging due to volume and complexity of emergency work in the Delivery Suite.

At the beginning of the day shift at 0800 the Delivery Suite Co-ordinator, Registrar and Consultant Obstetrician will review the IOL work for the day. If delays are anticipated, collaboratively the team will decide and plan any necessary rescheduling along with an explanation and apology to the parents. A specific plan of care for each mother should be documented in the maternal health records. Any rescheduling should be made by midday at the latest. This should be only under exceptional circumstances and ideally IOL should continue as planned.

### Uterine hyper-contractility

In the presence of abnormal fetal heart rate patterns and uterine hyper-contractility, consider subcutaneous Terbutaline 250 microgram once only.

- Position the mother into left lateral position
- Stop oxytocin infusion if this is in use
- Notify medical staff

**Use of Terbutaline notes:**

**Contra-indications:** Heart disease, Cardiac arrhythmia, Hyperthyroidism

**Observations:** check pulse rate, blood pressure & blood sugar if mother is diabetic.

**Side effects:** palpitation, tremor, nausea,

**Watch for:** breathlessness, chest pain

### Antenatal management of planned induction of labour (High Risk Pregnancies)

- Appropriate observations by obstetric medical staff.
- Discuss plan of care with all high risk women to decide timing and method of induction of labour.
- Provide 'Induction of labour' information leaflet.
- Decision to offer Induction of labour other than for prolonged pregnancy should be made by a consultant.
- Follow procedure in Low risk pregnancies above.

### Admission and management of prostaglandin induction of labour (high risk cases by medical staff)

- Consultant obstetrician will be lead professional for all cases
- For management see Admission and management of prostaglandin (low risk pregnancies) above.
- Decisions for delivery of a baby where the primary indication is SGA or abnormal Dopplers (risk of placental problems) should only be made by the FMU (FGA) team. Where delivery is expedited these babies are at risk of hypoglycaemia and should be monitored at birth as per guideline

### Patients where ARM can be done on the antenatal ward (NEW)

Most women can have the initial ARM on the antenatal ward as long as there is adequate staffing to allow appropriate monitoring.

The fetal head must be fixed in the pelvis before performing an ARM on the antenatal ward because of the risk of cord prolapse if ARM is performed when the fetal head is not engaged.

### The ARM should also happen on Observation area or Delivery Suite where

1. The CPR measurement is < 1 on the 36 week USS
2. Twin Pregnancies

### Patients where gel should be given on the Observation Area/Delivery Suite

Most women will be given the gel on the antenatal ward as long as there is adequate staffing to allow appropriate monitoring.

The induction should happen on Observation area or Delivery Suite where:

3. The CPR measurement is < 1 on the 36 week USS

### Induction of labour in women with a previous caesarean section (NEW)

[Also see VBAC Guideline.](#)

The decision to induce a woman with a previous caesarean section should be made by an Obstetric Consultant after a vaginal examination including an offered membrane sweep.

The Consultant should discuss the following with the woman:

- Decision to induce labour
  - Proposed method of induction
  - Decision to augment labour with oxytocin
  - Time intervals for serial vaginal examination
  - Selected parameters of progress that would necessitate discontinuing VBAC.
- 
- Is **not** absolutely contraindicated for women who have had one previous lower segment caesarean section
  - Should not be undertaken for women who have had two or more lower segment caesarean sections
  - Should not be undertaken in women who have had a classical caesarean section.

The Consultant should discuss risks of induction of labour with woman. Compared with spontaneous VBAC, induction or augmentation a VBAC is associated with:

- 2-3 fold increased risk of uterine rupture.
- 1.5 fold increased risk of emCS.

The woman's consent should be documented in the maternity record.

#### **Which is the safest method of induction in VBAC?**

- A Cochrane review suggests that there is insufficient evidence to recommend a particular method of induction (ARM, vaginal prostaglandins or intracervical foley catheter)
- However, induction with vaginal prostaglandins may be associated with an increased risk of uterine rupture compared with non-prostaglandin induction
- Oxytocin may be associated with a higher risk of uterine rupture when used to overcome delayed progress despite adequate contractions
- Oxytocin doses > 20 milliunits/min are associated with at least a 4 fold increase in risk of uterine rupture.

#### **Recommendations**

- If possible, ARM should be performed **without** the use of vaginal prostaglandins
- If ARM is not possible then consider an intracervical foley catheter or a single dose of vaginal prostaglandin
- A second dose of vaginal prostaglandin should **not** be given
- If there is delayed progress due to inadequate contractions then oxytocin may be used with caution
- Oxytocin should be administered as per the [VBAC guideline](#).

For guidance on how to inset a foleys catheter for IOL please see Appendix 6.

### Failed induction of labour

If amniotomy not possible following two doses of prostaglandin gel, the woman should be reviewed by a Senior Obstetrician for consideration of a third prostaglandin gel (not to exceed 4mgs in 24 hours)

If amniotomy still impossible after third dose of prostaglandin gel, induction of labour has failed

Discuss with consultant obstetrician and discuss the options with the woman including:

- Caesarean section
- Abandon process and await onset of labour
- Using further dose of prostaglandin without interval
- In some cases, consideration may be given to using Syntocinon infusion with intact membranes on consultant advice only

A plan of care will be made based on the consultant's input and woman's decision and documented in the woman's health records

## Appendix 1 – Induction of Labour at Term for Older Women

### Key Recommendations

Consider offering Induction of labour at 39-40 weeks if:

- Age 45 and over

Consider Offering Induction of labour at 41 weeks if:

- Age 40 -44

In the UK the proportion of maternities in women aged 40 is almost 4% and the average age of childbirth is continuing to increase. Maternal age is associated with an increased risk of obstetric complications including placental abruption, placenta praevia, malpresentation, low birth-weight, preterm and post-term delivery, stillbirth and postpartum haemorrhage.

Due to the decline in fertility with advancing age there is a greater use of assisted reproductive technologies and the possibility of multiple pregnancy increases. This may also increase the risks reported.

Pre-existing maternal medical conditions including hypertension, obesity and diabetes increase with advancing maternal age as do pregnancy related maternal complications such as pre-eclampsia and gestational diabetes. These medical co-morbidities can all influence fetal health and are likely to compound the effect of age on the risk of pregnancy in an older mother.

The incidence of stillbirth at term in women is low. It is higher in women of advanced maternal age. This at 39–40 weeks of gestation equates to 2 in 1000 for women  $\geq$  40 years of age compared to 1 in 1000 for women  $<$  35 years old. Women  $\geq$  40 years of age having a similar stillbirth risk at 39 weeks of gestation to women in their mid 20s at 41 weeks of gestation, at which stage the consensus is that induction of labour should be offered to prevent late stillbirth.

### Aims

- Ensure a universal policy in place within the OUH Foundation Trust
- Ensure induction is offered appropriately to these women
- Ensure adequate resources available

### Conditions Often Managed by Offering Elective Induction

Some chronic conditions that may be managed at all ages by offering elective induction of labour are more common in older women.

Please refer to the relevant guidelines. These include:

Chronic hypertension

Diabetes

Multiple pregnancy

Gestational diabetes

Obstetric cholestasis

Known growth restricted fetus / Abnormal umbilical or uterine artery dopplers

**Advice Where a Woman Wishes to Continue Pregnancy Beyond 41 Weeks**

Women aged 40 and older who choose to continue their pregnancy beyond 41 weeks, despite adequate explanation of the risks, should be advised to continually monitor fetal movement pattern.

**Midwife Responsibilities:**

Make an appointment at the Day Assessment Unit to arrange:

- Cardiotography (CTG)

## Appendix 2 – Induction of Labour using Prostaglandin Tablets

If prostaglandin gel is not available then prostaglandin tablets can be used instead. These tablets contain the same drug (prostaglandin E2) as the more usual Prostin gel, but the bio-availability (the amount that gets released into the mother) is different. For this reason, the standard dose is different.

Prostaglandin vaginal tablet 3mg is equivalent to prostaglandin gel 2mg.

Trials show that there is no significant difference in the maternal outcomes where 2-3mgs of prostaglandin are used. The CS rate and outcomes for the baby are similar. However, there is a non-significant increase in the need for Syntocinon augmentation in women given tablets, so gel should still be used as a first choice option if it is available.

### Primips Induction

Time	Does of prostaglandin
0 Hours	If Bishop's score $\leq$ 5, give prostaglandin vaginal tablet 3mg
6 Hours	If Bishop's score $\leq$ 5, give prostaglandin vaginal tablet 3mg
24 Hours	Perform ARM, commence Syntocinon within 2 hours of ARM

Use the same regime for women being induced for pre-labour SROM

### Multips Induction without a uterine scar

Time	Does of prostaglandin
0 Hours	If Bishops score $\leq$ 5, give prostaglandin vaginal tablet 3mg
6 Hours	Perform ARM, start Syntocinon within 2 hours of ARM. Be ready to reduce dose of Syntocinon or stop when labour establishes

Use the same regime for women being induced for pre-labour SROM

### (NEW) Multips Induction with a uterine scar

See [VBAC guideline](#) Appendix 5

Appendix 3 – Audit and Monitoring

Compliance Standard	Monitoring method	Frequency of monitoring	Review Group/Committee
Induction for prolonged pregnancy	8 sets of notes where women have had their labour induced	Annual	WCGC
Induction for previous caesarean section	8 sets of notes where women have had their labour induced	Annual	WCGC
Maternal and fetal observations prior to established labour	8 sets of notes where women have had their labour induced	Annual	WCGC
Process for dealing with maternal requests for labour	8 sets of notes where women have had their labour induced	Annual	WCGC

Appendix 4 – Induction of Labour Chart

Induction of Labour Gel number

Date \_\_\_\_\_

Gestation \_\_\_\_\_

Indication

Postdates  Other (please specify) \_\_\_\_\_

Pre-Gel Observations (documented on MEOWS chart) with explanation and consent

Abdominal Palpation

Fundus \_\_\_\_\_cms  
Lie \_\_\_\_\_  
Presentation \_\_\_\_\_  
Position \_\_\_\_\_  
Engaged \_\_\_\_\_(/5ths palpable)  
FMs \_\_\_\_\_

Pre-Gel CTG

Normal YES/NO Two signatures on trace   
(Refer to EFM guideline)

Do not give Gel if CTG is not normal:  
Continue trace and seek medical review

Internal Examination

PGE2 Gel is prescribed on the drug chart and is to be given irrespective of Bishops Score unless there is a risk of uterine hyperstimulation from intracervical application.

Cervical feature	Score			
	0	1	2	3
Cervix position	Post	Centre	Anterior	-
Consistency	Firm	Medium	Soft	-
Length (cm)	3	2	1	0
Dilatation (cm)	0	1-2	3-4	5-6
Station* to spines 1	-3	-2	-1	0+
<b>Total Bishop Score:</b>				

PGE2 Gel given: Dose \_\_\_\_\_ Batch Number \_\_\_\_\_

Date/Time \_\_\_\_\_

Post administration woman should lie on side for at least 30 minutes + CEFM to ensure fetal wellbeing.

Post-Gel CTG

Normal YES/NO Two signatures on trace   
(refer to EFM guideline) If no, seek medical review

Sign and Print name: \_\_\_\_\_ Date/Time \_\_\_\_\_

Birth Plan: document discussion with woman below:	Tick When Complete
Encourage mobilisation, eating and drinking (after 30 minutes post Gel)	
Plan for next assessment in 6 hours	
Discuss overall potential timeframe and procedures	
Discuss analgesia:- After Gel/early labour - Established labour (include pool if establishes after one gel)	
Answer any questions she may have	

**Monitoring Plan:**

An hourly assessment/discussion of maternal and fetal well-being should be had with the woman and noted in the table below.

Please circle as appropriate:

Gel +1 hour	+2 hours	+3 hours	+4 hours	+5 hours
Contracting Y/N	Contracting Y/N	Contracting Y/N	Contracting Y/N	Contracting Y/N
Analgesia needed Y/N	Analgesia needed Y/N	Analgesia needed Y/N	Analgesia needed Y/N	Analgesia needed Y/N
Discussed wellbeing Y/N	Discussed wellbeing Y/N	Discussed wellbeing Y/N	Discussed wellbeing Y/N	Discussed wellbeing Y/N

**N.B. Commence CTG in presence of uterine hyperstimulation.**

**When contractions start commence CTG for 30 minutes to confirm reassuring FHR.**

CTG Normal	Tick When Complete	CTG Not Normal
Discontinue & commence intermittent auscultation throughout labour (unless $\geq 2$ gels required or clinical indications arise)		Continue monitoring and seek senior review
Two signatures on CTG		
CTG filed in maternal notes		

**Analgesia Given**

Type of Analgesia	Date Given/Commenced	Time Given/Commenced

Prescribed analgesia must also be documented on the drug chart. Only one dose of Meptid may be given. If a 2<sup>nd</sup> dose is required a CTG must be commenced and a doctor review.

As a minimum 4 hourly fetal and maternal observations must be documented on the MEOWS chart following the induction of labour guideline.

For all high risk inductions an individualised management plan for maternal and fetal observations should be made by the doctor prescribing the gel and documented in the Woman's Health Records.

## Appendix 5 – Mode of Birth Clinic Referral Form

### Referral for Mode of Birth Clinic /Consultant Midwife Opinion or VBAC CLINIC

**For advice please contact the consultant midwives via email**

Tick Appropriate box

**VBAC:** send referral form to or contact the front office  
01865 221651 (JRH)  
01295 229453 (Horton)

**Criteria for referral:**

- Woman undecided on mode of birth or requesting an Elective C/S without a clinical indication:

\*\*\*\*\*

**Consultant Midwife/mode of birth** send referral letter or contact the front office  
01865 221651 (JRH)  
01295 229453 (Horton)

**Criteria for referral:**

- Significant anxiety resulting from previous birth experience
- Significant fear of childbirth
- Maternal request for primary Caesarean section
- Any case for which you would value extra midwifery planning

\*\*\*\*\*

Woman's sticky label:	Contact number:
Consultant Obstetrician:	Community Midwife team:
Date of referral:	Parity:
EDD:	
Reason for referral:	
Referred By:	Contact number:

Referral to VBAC, mode of birth clinic or consultant midwife appointment v 5.0 February 2014

## Appendix 6 - Insertion of Foleys Catheter for IOL (NEW)

### **Instruments required**

- Vaginal examination pack, sponge holding forceps and aqueous gel
- Foleys catheter (16 Fr in size- this can hold 30 mls of sterile water)
- 20ml or 50ml syringe
- Bowl with 30ml of sterile water
- Mepore or other similar tape
- Cusco's speculum (with a lock) may be required

### **Preparation**

- The woman will be admitted as usual to the antenatal ward
- Usual pre-induction of labour assessment by the midwife including; CTG until Dawes Redman/DR C Bravado criteria are met
- Verbal informed consent is obtained for the procedure and documented
- The woman is placed initially in a semi-recumbant position, however if the procedure is unsuccessful in this position, the woman will require transfer to delivery suite and lithotomy position used – consider use of Entonox for anxious women
- A trained midwife, ST6-7 or Consultant Obstetrician can perform this procedure
- Sterile Cusco's speculum can be used to visualise the cervix if unable to insert digitally

### **Procedure**

- A vaginal examination is performed to assess the length of the cervix
- The Foley catheter is held with a sponge holding forceps, taking into consideration the length of the cervix, and inserted into the cervix – aim for balloon to be inflated in extra amniotic space. Avoid holding the sponge holder over the balloon end of the catheter-hold at the tip of the catheter
- The Foley catheter is held with sponge holding forceps and inserted into the cervix until the forceps meet the external cervical os
- The catheter is then held in place and the sponge holding forceps removed
- Inflate with 30mls of sterile water
- When the balloon is inflated, pull the catheter downwards so that the balloon is applying pressure to the internal cervical os and tape the catheter to woman's inner thigh
- There is no need for a routine CTG after the procedure until the woman is contracting or there is rupture of the membranes
- CTG is needed if there are clinical reasons such as additional risks, such as IUGR.

### **Post-insertion of balloon management**

- CTG monitoring not required until contractions have commenced or there is rupture of membranes
- If spontaneous rupture of membranes has occurred, treat as usual induction undergoing SROM and assess for oxytocin requirement
- If the balloon is expelled then continue with artificial rupture of membranes (ARM)
- All women will return to IOL bay after 24 hours for reassessment and for ARM if suitable
- If cervix is not favourable for an ARM after 24 hours- counsel for a Caesarean section as failed induction of labour.

### **Important Points**

- If the balloon is expelled the cervix is usually dilated to greater than 3cms and ARM should be possible. Decision for timing of ARM should be based on clinical safety grounds-maternal/fetal and labour ward status
- If there is spontaneous rupture of membranes and the balloon is in situ –remove the balloon and reassess the woman to consider oxytocin (there is a risk of infection with SROM if the balloon remains in situ)
- If the cervix is uneffaced, a trial of oxytocin can be considered, to be decided on a case-by-case basis, after discussion with the Consultant. There is no role for prostaglandins after insertion of a balloon if the cervix is not effaced
- The balloon is not associated with uterine hyperstimulation so if it occurs consider possibility of uterine rupture or labour.

## References

Centre for Maternal and Child Enquiries (CMACE). Saving Mothers' Lives: reviewing maternal deaths to make motherhood safer: 2006–08. The Eighth Report on Confidential Enquiries into Maternal Deaths in the United Kingdom. *BJOG* 2011;118(Suppl 1):1–203.

Dhanjal MK and Kenyon A. Scientific Impact Paper Number 34. 2013. Induction of Labour at term in older mothers

NICE Clinical Guideline July 2008 Induction of labour.

NICE clinical guideline Sept 2007 Intrapartum care - care of healthy women and their babies during childbirth.

Reddy UM, Ko CW, Willinger M. Maternal age and the risk of stillbirth throughout pregnancy in the United States. *Am J Obstet Gynecol* 2006;195:764–70.

Wyatt PR, Owolabi T, Meier C, Huang T. Age-specific risk of fetal loss observed in a second trimester serum screening population. *Am J Obstet Gynecol* 2005;192:240–6.

COCHRANE REVIEW. VAGINAL PROSTAGLANDIN FOR INDUCTION OF LABOUR AT TERM. Kelly et al. 2009

A prospective comparative study on the use of Prostaglandin E2 gel (2mg) and Prostaglandin E2 tablet (3mg) for the induction of labour in primigravid women with unfavourable cervixes. *Eur J Obstet Gynaecol & Reproductive Biol* 33 (1989) 169-175.