

<b>INDUCTION OF LABOUR</b>	<b>DOCUMENT TITLE:</b>	<b>INDUCTION OF LABOUR</b>
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	<b>The electronic version of this document is the definitive version</b>	

# INDUCTION OF LABOUR

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A translation service is available for this document. The Interpretation/Translation Policy, Guidance for Staff is located on the intranet under Trust-wide Policies.

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# THE DUDLEY GROUP NHS FOUNDATION TRUST

## INDUCTION OF LABOUR

### 1. INTRODUCTION

Induction of labour involves using artificial means to assist the mother in delivering her baby. This guideline outlines the process for induction of labour.

### 2. STATEMENT OF INTENT/ PURPOSE OF GUIDELINE

This guideline has been developed with the aim of providing guidance on the:

- Clinical indications for induction of labour
- Appropriate place and timing of induction of labour
- Care of the women during the induction process, to include when to consider fetal and maternal monitoring
- Providing information for pregnant women
- Management of complications of induction, such as failed induction.

### 3. SCOPE

This document applies to all maternity and medical staff caring for women receiving an induction of labour.

### 4. DEFINITIONS

**Amniotomy** the deliberate rupturing of the foetal membranes to bring on labour

**Artificial rupture of membranes** - a term used during pregnancy to describe the artificial rupture of the amniotic sac.

**Bishops Score** is a pre- labour scoring system to assist in predicting whether induction of labour will be required

**Cephalic**- Fetal head down position

**Cholestasis** is a condition where bile cannot flow from the liver to the duodenum.

**Cardiotocography (CTG)** is a technical means of recording (-graphy) the fetal heartbeat (cardio-) and the uterine contractions.

**Dinoprostone** is used to prepare the cervix for the induction of labour in pregnant women who are at or near term

**Expected Date of Delivery (EDD)**- The date a baby is expected to deliver on.

**Intra Uterine Death (IUD)** – A fetal loss occurring whilst a baby is in utero

**Intra Uterine Growth Restriction (IUGR)**- when the growth of a baby is expected to be smaller than usual.

**Macrosomia**- is used to describe a newborn with an excessive birth weight

**Meconium** is the earliest stools of an infant or fetus

**MEOWS** modified early obstetric warning meows chart

**Multiparous** a woman who has given birth two or more times is multiparous

**Oligohydraminous** is a condition in pregnancy characterised by a deficiency of amniotic fluid.

**Parity** – the number of times a women has given birth

**Proteinuria** the presence of protein in the urine

**Spontaneous Rupture of membranes** – a term used during pregnancy to describe the spontaneous rupture of the amniotic sac.

**Small for Gestation Age (SGA)**- Babies are those who are smaller in size than normal for the baby's sex and gestational age.

## 5. DUTIES/RESPONSIBILITIES

### 5.1 Midwife

it is the responsibility of the midwife to be conversant with this guideline.

## 6. PROCESS FOR INDUCTION OF LABOUR (IOL)

Induction of labour is a relatively common procedure and can occur for a range of medical reasons. There is a range of ways to induce labour. Induction of labour needs to be clearly and clinically justified (NICE, 2008).

Induced labour has a larger impact on the birth experience of women. When compared to spontaneous labour it may be less efficient and is usually more painful than spontaneous labour and so epidural analgesia and assisted delivery are more likely to be required (NICE, 2008).

## 7. ANTENATAL PROCEDURE FOR ARRANGING INDUCTION OF LABOUR

- Information will be given to all women via their bounty information leaflet which can be discussed with the women near to term if appropriate. An explanation should be given.
- At the 38 week antenatal clinic or community midwife visit, all women should be offered information about the risk of prolonged pregnancy beyond 42 weeks. Options should be explained namely membrane sweep, expectant management or IOL at Term +12
- A **membrane sweep** should be offered to all women at approximately 40 and 41 weeks
- Additional membrane sweeps should be offered if labour does not start spontaneously
- The woman will be seen at 41 weeks either in the community or hospital antenatal clinic and a date arranged for IOL with Antenatal OPD
- Women having IOL should be informed of the reason for IOL, the method of IOL, its risks and benefits, alternatives to IOL, pain relief, the options in case of failed IOL.
- "Information for women having their labour induced" leaflet to be given to the woman ([Appendix 1](#)). The woman's decision regarding IOL should be supported.
- Women are advised to call the obstetric Unit at 10.30hrs on the date for IOL, to arrange an admission time or fetal monitoring if admission is not possible

## 8. TIMING OF INDUCTION

Induction of labour for post maturity must be booked for **Term +12**

## 9. INDICATION FOR INDUCTION OF LABOUR (IOL)

### 9.1 Appropriate reasons for IOL may include

- Uncomplicated prolonged pregnancy (Term+12 days)
- Diabetes - refer to management of diabetes in pregnancy
- Prelabour rupture of membranes Term and Preterm
- Fetal Growth Restriction
- Multiple Pregnancy
- Obstetric Cholestasis
- Pregnancy induced hypertension with proteinuria
- Fetal compromise (e.g. poor dopplers or oligohydramnios)
- IUD
- Rhesus Incompatibility
- Any other indication should be discussed with the woman's Consultant

### 9.2 Maternal Request for IOL

Maternal request is not an indication for IOL. However, maternal request for IOL should be considered when there are compelling, exceptional psychological or social reasons and the woman has a **favourable** cervix and the gestation is **at or after 40 weeks**. any decision to induce at **maternal request should be taken at Consultant level**.

## 10. INDUCTION OF LABOUR IN SPECIFIC CIRCUMSTANCES

When undertaking induction of labour in women with recognised risk factors the clinical discussion regarding method of induction should be taken at consultant level. The women should be reviewed by the consultant on-call before the induction is commenced.

### 10.1 Prolonged pregnancy

Prolonged pregnancy is defined as a pregnancy that continues beyond 42 weeks gestation which is calculated from the early pregnancy scan.

- All women are offered induction of labour at Term +12

### 10.2 High parity

Grand multiparous women (women having their 4th and subsequent pregnancy) are at greater risk of a ruptured uterus following IOL with Prostaglandin or standard Syntocinon regimes.

### 10.3 Preterm Pre-labour rupture of membranes after 34 weeks

The maternity team should discuss management with the woman and whether to induce labour using prostaglandins after discussing the risks to the mother (risk of sepsis, risk of needing a Caesarean Section), risks to the fetus (risk of sepsis, prematurity problems) as well as considering the local availability of neonatal intensive care facilities.

IOL should not be carried out before 34 weeks for preterm premature rupture of membranes unless there are clinical indications e.g. fetal compromise. Ideally induction should not be carried out prior to 37 weeks, unless there are clinical indications. (Refer to guideline for management of pre labour rupture of membranes)

#### 10.4 Pre-labour rupture of membranes at term

At or after 37 weeks:

- Following initial assessment, conservative management for 18-24 hours
- If meconium liquor for induction on confirmation of ruptured membranes.
- Refer to guideline on management of women with prelabour rupture of membranes with term and preterm pregnancies

#### 10.5 Previous Caesarean Section

- IOL is not contra-indicated but careful consideration of the woman's clinical condition should be taken before induction is started.
- Prostaglandin IOL in previous CS increases the risk of;
  - Uterine scar rupture (2-3 fold)
  - Need for emergency cs (1.5 fold)
  - Risk of perinatal death from uterine rupture (compared to non-prostaglandin methods and compared to prostaglandin IOL in the unscarred uterus)

Counselling women with previous CS on prostaglandin IOL should include obtaining and documenting an informed consent in the handheld notes, taking into account the woman's circumstances and wishes. Those women should be informed that there is an increased risk of emergency CS and increased risk of uterine scar rupture with Prostaglandin IOL.

- The decision to induce, method of induction, the use of propress, the interval of cervical assessment and progress parameters should all be consultant/senior obstetric led decisions.
- Assessment of response or lack of response to prostaglandin IOL, for women with a previous CS, should be taken by the senior obstetrician and findings discussed with the consultant and documented.

#### 10.6 Fetal Growth Restriction

All babies who are SGA are considered high risk and should have continuous monitoring in labour as recommended by the Royal College of Obstetrics and Gynaecology and NICE.

Infants with fetal growth compromise are at a higher risk of perinatal death. One study found an association with perinatal mortality and growth restriction that was nearly five times that of normal weight infants. Infants with growth compromise enter labour in an increased state of vulnerability and are more likely to become acidotic because of:

- Uteroplacental insufficiency
- Lower metabolic reserves due to intrauterine malnutrition or pre-existing hypoxia
- An umbilical cord more prone to compression due to a reduction in amniotic fluid volume.

In cases with EFW < 10 th centile, reduced liquor volume it is advisable to discuss the plan for IOL and the method of IOL with the consultant. The decision to use prostaglandin **SHOULD BE A CONSULTANT DECISION.**

If there is severe fetal growth restriction with confirmed fetal compromise, induction of labour is not recommended. The perinatal mortality for absent end-diastolic velocity is 20% versus reversed end-diastolic velocity which is 68%. Abnormal Umbilical Artery dopplers have been shown to increase the rate of admission and length of stay of small babies on the neonatal ICU. Therefore, delivery in these cases is likely to be by Caesarean section.

## **10.7 Maternal Diabetes**

Refer to guideline on Diabetes in pregnancy guideline

## **10.8 Intrauterine Fetal Death**

In IUD the women should be offered specialist support.

If the membranes are intact with no evidence of infection or bleeding the woman should be given the choice of immediate IOL or expectant management. In the event of ROM, infection or bleeding, immediate IOL is preferred. This involves oral mifepristone, followed by prostaglandin or misoprostol.

For women who have intrauterine fetal death and who have had a previous caesarean section, the risk of uterine rupture is increased. The dose of vaginal prostaglandin should be reduced accordingly, particularly in the third trimester.

## **11. CONTRAINDICATIONS TO INDUCTION OF LABOUR**

### **11.1 Absolute**

- The fetal lie is not longitudinal
- Previous Caesarean section for a recurrent cause.
- Previous classical caesarean section
- A tumour occupies the pelvis.
- Previous uterine surgery when the uterine cavity has been opened
- Fetal compromise such that the fetus would not tolerate contractions.
- Breech
- Hypertonic uterine inertia

### **11.2 Relative/care required**

- Multiple pregnancy
- Suspected major cephalopelvic disproportion
- Evidence of antepartum fetal compromise (significant IUGR, oligohydramnios, abnormal CTG, Doppler and biophysical profile)
- Previous difficult labour/delivery.
- Grand multip (P>4)

### **11.3 Contraindications of Prostaglandin Only**

Care required with:

- Glaucoma or raised intra-ocular pressure
- Asthma
- Heart disease

## **12. WOMEN WHO DECLINE INDUCTION OF LABOUR**

From 40+12 weeks

- Alternate day cardiotocography
- Twice weekly ultrasound estimation of liquor volume.
- An individual management plan must be documented in the woman's antenatal notes
- If not already aware, the patient's consultant should be informed
- Women who are booked midwifery led must be referred to Day Assessment Unit and seen by a Senior Obstetrician and will be transferred to Consultant care



### 13. CLASSIFICATION OF INDUCTION

Women who are having their labour induced can be classified as either a low or high risk induction and the care they receive in labour is dependent upon this.

#### 13.1 Low Risk Induction of Labour

Any woman whom is midwife led and the induction is booked at Term+12. Once in labour these women can be cared for as per Guideline "Care of the Low Risk Woman in Labour"

**13.2 Any other woman must be classed as High Risk** and once in labour cared for as per 'Care of the High Risk Woman in Labour' guideline.

Prior to induction the woman should be aware of the benefits and risks associated with induction and the clinical reason for induction in her case.

### 14. METHODS OF INDUCTION

**14.1 Propess** is a vaginal pessary containing 10mgs of Dinoprostone (Prostaglandin E2) presenting as a thin flat rectangular polymeric pessary contained in a knitted Polyester retrieval system is used for all inductions of labour apart from Grand Multips.

The release rate is approximately 0.3mg per hour over 24 hours in women with intact Membranes.

It is to be used for the initiation of cervical ripening and allow amniotomy which forms an integral part of the induction process. The establishment of regular contractions is an added benefit, leading to a reduction in the need for oxytocin

#### 14.2 Prostin PGE1 gel

Grand multiparous women are at greater risk of ruptured uterus following IOL with Prostin or standard Syntocinon regimes.

If the cervix is favourable when assessed ARM and Syntocinon (2 hours after ARM if contractions not yet established or immediately if more than 6 hours after last prostaglandin dose) is the induction method of choice. If the cervix is unfavourable Prostin PGE1 gel: 1 mg PGE2 6-8 hourly

### 15. INDUCTION USING PROPESS (PROSTAGLANDIN E2)

Propess is the vaginal preparation of PGE2 of choice at Russells Hall Hospital. Irrespective of cervical score, vaginal PGE2 is the method of choice in both nulliparous and multiparous women with intact membranes, unless there is a history of uterine hypercontractility secondary to prostaglandins in the past, in which case propess should only be used with caution due to the recurrence risk. In the presence of ruptured membranes there is no difference between prostaglandins and immediate oxytocin.

### 15.1 Criteria for use of PROPESS :

- Primip cephalic presentation
- Multip Para 3 or less cephalic presentation
- Diabetes
- IUGR
- Multiple pregnancy
- Term Pre-Labour SROM (if cervix unfavourable/forewaters intact) see separate guideline
- Other high risk IOL
- Previous C/S

### 15.2 Contraindications to using PROPESS:

- Hyperstimulation from previous propess use
- Suspicious or pathological CTG

### 15.3 Induction with propess procedure

- Check the woman's EDD against the dating scan.
- **Maternal observations prior to insertion of propess:**

Observations:	Considerations:
<ul style="list-style-type: none"><li>• Pulse,</li><li>• Temp,</li><li>• BP,</li><li>• urinalysis,</li><li>• Respirations</li></ul>	Record on MEOWS Chart
<ul style="list-style-type: none"><li>• Vaginal Examination</li></ul>	Prior to insertion, proforma a bishops score.

- **Fetal Observations prior to insertion of propess:**

Fetal Observations:	Considerations:
Abdominal Palpation	If malpresentation refer to obstetrician
<ul style="list-style-type: none"><li>• CTG – 40 minutes at least before propess insertion</li></ul>	<ul style="list-style-type: none"><li>• If the CTG is classified as suspicious or pathological, withhold Propess and seek medical advice immediately.</li><li>• Document the maternal and fetal observations and CTG classification of the CTG.</li></ul>

## 15.4 Administration of PROPESS Guidance

- Induction should be ideally commenced in the morning and be undertaken on the Obstetric Unit.
- Administered immediately after removal from freezer
- Insert into the posterior fornix of the cervix
- Following insertion give a Bishop score. The vaginal assessment and Bishop score must be recorded on the Induction sheet and secured in the intrapartum notes.
- The excess tape outside the vagina may be cut and removed to prevent accidental removal of the propess

## 15.5 Guidance to Women

The woman should be informed to alert staff if and when she develops any

- Uterine activity
  - Backache
  - Abdominal pain
  - Vaginal bleeding
  - Reduced fetal movements or
  - Ruptures her membranes
- The woman should be informed to alert staff if the Propess falls out. If it dislodges and falls out onto a 'clean' surface it can be re-inserted. In other cases, a new Propess should be inserted if ARM not feasible at that time; this should only be used for 24 hours after the insertion of the first propess.
  - THE WOMAN WILL BE REQUESTED TO remain on the bed for at least 30 minutes following insertion

## 15.6 Following administration of Propess:

- Fetal wellbeing must be assessed once painful contractions are detected or reported. This is done by CTG initially, followed by intermittent auscultation in
- Low risk women if CTG confirms normality.
- Vaginal assessment should only be repeated if labour appears to be established, or following spontaneous rupture of membranes to exclude cord prolapse.

## 15.7 Maternal Observations POST propess:

Observations:	Frequency:	Considerations:
Pulse Temp BP Urinalysis Respirations	Four Hourly Record on MEOVS Chart	Record on MEOVS Chart
Vaginal Examination	There is no need to routinely reassess vaginally until 24 hours following insertion	Consider performing if: <ul style="list-style-type: none"> <li>○ uterine activity</li> <li>○ backache</li> <li>○ abdominal pain</li> <li>○ vaginal bleeding</li> <li>○ ruptures of membranes</li> </ul>

## 15.8 Fetal Observations POST propess:

Observations:	Frequency:	Considerations:
Abdominal Palpation	Four Hourly	
CTG – 40 minutes at least	Twice Daily  One a.m One p.m  Advisable 6-8 hrs between  <b>IOL for postmaturity CTG only ONCE daily</b>	If the CTG is classified as suspicious or pathological, withhold Propess and seek medical advice immediately.  Document the maternal and fetal observations and CTG classification of the CTG.
FHH Auscultation	4hrly	

## 15.9 If spontaneous rupture of membranes occurs post propess insertion

- CTG to be performed
- If CTG Normal Do Not remove propess following SROM
- If CTG suspicious/pathological remove propess
- In cases of ruptured membranes, if labour has not commenced within 24 hours of insertion then Propess should be removed and intravenous oxytocin commenced after 30 minutes, depending on Delivery Suite workload.

## 15.10 Once Propess has been insitu for 24hrs:

- All women should be assessed vaginally 24 hours after administration of Propess (any delay should be documented)
- With intact membranes, ARM should be performed if possible after 24 hours.
- If ARM is NOT possible after 24 hours, propess should be reviewed and assessed by senior Obstetrician and a management plan for the Propess to be left in-situ for a further 8 hours must be documented in the intrapartum notes
- If ARM is not feasible after this further 8 hours, remove Propess and leave until the following morning.
- If ARM is still not possible a Caesarean section should be advised
- It is safe to commence oxytocin 30 minutes after removal of Propess
- If labour commences while Propess is in situ, a vaginal examination should be performed and if labour is confirmed, Propess should then be removed
- Propess may however be left in-situ in women with regular uterine activity (in the absence of tachysystole or hyper stimulation) prior to the 24 hour time limit if the cervix is not suitable for amniotomy.
- The pool can be used in suitable women after removal of Propess

### 15.11 When to remove Propess

Propess is designed to remain in the Vagina for up to 24hours (it may be left for a further 8 hours if ARM still not possible, at Senior Obstetrician discretion); however, it should be **removed immediately** in the following instances:

- When labour is established (i.e. Regular painful contractions and progressive cervical dilatation from 4cm)
- PV bleeding (not a 'show')
- Uterine hyper stimulation or hypertonic uterine contractions with CTG abnormalities
- Evidence of fetal compromise
- At least 30 minutes prior to starting an intravenous infusion of oxytocin
- Following 24 hours (32 hours in selected cases, see above) even if labour is not established
- Evidence of maternal systemic adverse dinoprostone effects such as vomiting, hypotension or tachycardia, provided there is no other obvious cause of these signs and symptoms which can be corrected e.g. tachycardia due to dehydration and vomiting following opiate injection

## 16. INDUCTION OF GRAND MULTIPS

### 16.2 Induction with PROSTIN procedure

- Check the woman's EDD against the dating scan.

### 16.3 Maternal observations PRIOR to insertion of Prostin:

Observations:	Considerations:
Pulse Temp BP urinalysis Respirations	Record on MEOWS Chart
Vaginal Examination	Prior to insertion, proforma a bishops score.

### 16.4 Fetal Observations PRIOR to insertion of Prostin:

Fetal Observations:	Considerations:
Abdominal Palpation	
CTG – 40 minutes at least before propess insertion	If the CTG is classified as suspicious or pathological, withhold Propess and seek medical advice immediately.  Document the maternal and fetal observations and CTG classification of the CTG.

### 16.5 Administration Guidance:

- Induction should be ideally commenced in the morning and be undertaken on the Obstetric Unit.
- Prostin is inserted into the posterior fornix of the cervix.
- The vaginal assessment and Bishop score must be recorded on the Induction sheet and secured in the intrapartum notes.
- If the cervix is >2cm dilated, artificial rupture of membranes (ARM) may be performed.
- A second dose can be administered after 6hrs if labour does not start; a vaginal assessment and bishop score must be undertaken and documented prior to administration of the Prostin I
- If a third prostin is required this must be discussed with the Consultant Obstetrician.

### 16.6 Maternal Observations Post Prostin:

Observations:	Frequency:	Considerations:
Pulse Temp BP Urinalysis Respirations	Four Hourly Record on MEOWS Chart	Record on MEOWS Chart
Vaginal Examination	There is no need to routinely reassess vaginally until 24 hours following insertion	Consider performing if: <ul style="list-style-type: none"> <li>○ uterine activity</li> <li>○ backache</li> <li>○ abdominal pain</li> <li>○ vaginal bleeding</li> <li>○ ruptures of membranes</li> </ul>

### 16.7 Fetal Observations Post Prostin:

Observations:	Frequency:	Considerations:
Abdominal Palpation	Four Hourly	
CTG – 40 minutes at least	Twice Daily <ul style="list-style-type: none"> <li>• One a.m</li> <li>• One p.m</li> </ul> Advisable 6-8 hrs between  <b>IOL for postmaturity CTG only ONCE daily</b>	If the CTG is classified as suspicious or pathological, withhold Propress and seek medical advice immediately.  Document the maternal and fetal observations and CTG classification of the CTG.
FHH Ascultation	4hrly	

## 17. Other methods of induction of labour

### 17.1 Amniotomy

To be undertaken during Induction process if possible

- Avoid if baby's head is high.

To avoid cord prolapse:

- Assess engagement of presenting part before induction
- Palpate for umbilical cord presentation during preliminary vaginal examination (avoid dislodging baby's head).

### 17.2 Syntocinon Regime

- In a primip who has not had prostaglandin and is not contracting syntocinon should be started immediately following ARM unless they have established strong regular contractions. If prostaglandin has been given recently, delay the start of syntocinon until 6 hours from the last prostaglandin dose.
- With an unfavourable cervix (i.e. less than 3cm dilated) once syntocinon is commenced a VE should be delayed until six hours of regular contractions, unless clinically indicated before this.
- For multips allow 2 hours to see if contractions establish
- if no regular contractions; commence syntocinon and reassess 4 hours from regular contractions,
- if regular contractions have established; re-examine four hours from onset of regular contractions
- Any women receiving syntocinon for IOL or augmentation should be **ASSESSED AND EXAMINED BY THE MIDDLE GRADE BEFORE SYNTOCINON COMMENCEMENT**. This assessment should be documented.
- 10iu Syntocinon added to 49 ml Hartmann's solution should be given in a 50ml syringe through a large bore cannula (16 gauge or more)
- The infusion should commence at 2 iu/min and be doubled at 30 minute intervals in the first stage, 15 minute intervals in the second stage
- With pump calibrated at ml/hour 0.6 ml/hour = 2 mu/min
  - 0.6ml/hr = 2mu/min
  - 1.2ml/hr = 4mu/min
  - 2.4ml/hr = 8mu/min
  - 4.8ml hr = 16mu/min
  - 9.6ml/hr = 32mu/min
- Infusion should be increased at 30-minute intervals until the contractions are 4 in 10 minutes.
- Continuous CTG must be performed and a partogram commenced.
- In the event of signs of fetal distress or excessive uterine activity, the Syntocinon infusion should be discontinued or reduced and the Lead Midwife and Senior Obstetrician informed.

#### 17.2.1 Reduce Infusion Rate if: -

- Definite non-reassuring CTG.
- Contractions last > 60 seconds.
- Uterus contracts for > 40% of time over 10 minute interval.
- Coupling of contractions – this implies over stimulation.

## **18. ONSET OF LABOUR**

### **18.1 Contractions Begin in Low Risk Induction of Labour (POSTMATURITY only)**

This relates to women who are low risk induction and contractions begin after an ARM or 1 prostin administration:

- A 40 minute CTG must be undertaken to assess fetal well being
- If the CTG is normal and the woman is deemed low risk, the woman can be cared for as Per Guideline “Care of the Low Risk Woman in Labour”
- If the CTG is abnormal the Lead Midwife must be informed and the Senior Obstetrician called to review

### **18.2 Contractions Begin in High Risk Induction of Labour**

- A 40 minute CTG must be undertaken to assess fetal well being.
- If CTG normal care as per Guideline “Care of the High Risk Woman in Labour”
- If the CTG is abnormal the Lead Midwife must be informed and the Senior Obstetrician called to review
- If indicated during labour and the cervix becomes favourable, ARM may be performed.
- Syntocinon should not be started for at least 6 hours after Prostin has been given.

## **19. FAILED INDUCTION OF LABOUR (IOL)**

**19.1** In some women labour may not start following the maximum dose of prostaglandin in this situation:

- Woman must be assessed by a Consultant/Senior Obstetrician
- Assess fetal wellbeing with electronic fetal monitoring.
- Provide support, and make decisions in accordance with woman’s wishes and clinical circumstances.

**19.2** Management options include:

- If induction has failed a Caesarean section should be advised.
- If repeat attempt at IOL requested, an assessment of fetal well being via liquor volume plus Doppler should be undertaken first
- An individual management plan must be documented in the woman’s intrapartum notes

## **20. UTERINE HYPERSTIMULATION WITH INDUCTION AGENTS**

### **20.1 Oxytocin**

- Uterine hypercontractility with or without FHR changes during Oxytocin infusions usually resolves with reduction or cessation of the infusion, but if it fails tocolysis should be considered.
- The frequency of contractions should not exceed 4 in 10 minutes.



## 20.2 Prostaglandins

- If prostaglandin only has been used, removal of the remainder of the agent may help to alleviate the uterine hypercontractility.
- Irrigation of the cervix/vagina is not beneficial.
- In the presence of abnormal FHR patterns and uterine hyperstimulation, tocolysis should be considered<sup>1</sup>.
- In the presence of abnormal FHR patterns and uterine hyperstimulation secondary to syntocinon, the syntocinon infusion should be discontinued.

## 21. TOCOLYSIS

The following drugs can be used as a tocolytic:

- Subcutaneous terbutaline 0.25mg
- Salbutamol inhaler 4 puffs

These drugs must be documented on the woman's prescription sheet and on the Partogram.

Contraindications to terbutaline – do not use if the woman has a history of cardiac problems, eclampsia or severe pre-eclampsia or bleeding.

## 22. AUDITABLE STANDARDS

Implementation of this guideline will be audited annually and is included in the Maternity Audit Programme. 1% of health records will be audited from the total number of identified cases. The audit criteria will as a minimum, monitor the implementation of the following standards and subject to a multidisciplinary review

- Membrane sweep undertaken at 40 and 41 weeks gestation and documented in the pregnancy handheld notes
- Indication for induction of labour using the following definitions: prolonged pregnancy, preterm prelabour rupture of membranes, prelabour rupture of membranes at term, previous caesarean section, fetal growth restriction, maternal diabetes, intrauterine death documented in the intrapartum notes
- Method of induction used documented in the intrapartum notes
- Maternal observations carried out as per guidance during induction prior to onset of labour
- Fetal observations carried out as per guidance during induction prior to onset of labour
- Management plan documented in intrapartum notes if induction failed
- If induction for maternal request, decision made by Consultant
- When induction of labour is declined an individual management plan is documented in the woman's pregnancy hand held notes

When the audit has identified deficiencies the action plans will be monitored through the named meeting/manager.

## 23. MONITORING

	Lead	Tool	Frequency	Reporting arrangements and monitoring of action plans	Acting on recommendations and Lead(s)	Change in practice and lessons to be shared
<p>The audit will include as a minimum:</p> <ul style="list-style-type: none"> <li>• Membrane sweep undertaken at 40 and 41 weeks gestation and documented in the pregnancy handheld notes</li> <li>• Indication for induction of labour using the following definitions: prolonged pregnancy, preterm prelabour rupture of membranes, prelabour rupture of membranes at term, previous caesarean section, fetal growth restriction, maternal diabetes, intrauterine death documented in the intrapartum notes</li> <li>• Method of induction used documented in the intrapartum notes</li> <li>• Maternal observations carried out as per guidance during induction prior to onset of labour</li> <li>• Fetal observations carried out as per guidance during induction prior to onset of labour</li> <li>• Management plan documented in intrapartum notes if induction failed</li> <li>• If induction for maternal request, decision made by Consultant</li> <li>• When induction of labour is declined an individual management plan is documented in the woman's pregnancy hand held notes</li> </ul>	Consultant Lead - Audit	Audit	Annually	Directorate Audit meeting	Intrapartum Quality Practice Development Team	<p>Lessons learnt and any changes in practice will be communicated via</p> <ul style="list-style-type: none"> <li>• Email</li> <li>• Memos</li> <li>• Posters</li> <li>• CHATTER</li> <li>• Training</li> </ul>

## 23. REFERENCES

Hospital Episodes Statistics. 'Maternity Data in HES'. HES Online Database. NHS Information Centre for Health and Social Care

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NICE (2007) Intrapartum care: Care of the healthy women and their babies during childbirth. London

Royal College of Obstetrics & Gynaecology (1998) Induction of labour. No. 16, July. Joint RCOG/NHS Executive National Evidence-based Guidelines.

Royal College of Obstetricians & Gynecologists (2007) Birth after previous Caesarean birth. RCOG Green Top Guideline number 45

# Information for Women Having their labour Induced

**Planned date of Induction of  
labour.....**

The following information explains what induction of labour means and what it will involve. If all your questions are not answered, or you feel anxious about any aspect of this, please do talk to your midwife or doctor.

## **What is induction of Labour?**

Induction of labour or “being induced” means having your labour started artificially. It can take some time to actually get your labour started and therefore longer before you are delivered. However, some women can experience rapid progress, once labour is established.

## **Why is it necessary?**

INDUCTION IS NOT THE EASY OPTION.

Induction of labour is considered necessary if your health or your baby’s health is thought to be at risk should your pregnancy continue much longer.

## **Where will you be induced?**

The Induction will take place on the Obstetric Unit (2<sup>nd</sup> floor).

Your midwife or doctor will give you a day and a time to call the Obstetric Unit to arrange what time you need to come in for the induction of your labour (on the 2<sup>nd</sup> Floor).

On this day, bring your handheld records together with your personal items that you will need for your hospital stay.

Once induction of labour has been started, you will stay in hospital until your baby is born.

## **What will happen?**

Following discussion, the midwife will undertake a full examination; this will include, measuring your blood pressure, pulse rate, abdominal examination, monitoring your baby’s heart rate and a vaginal examination. This will assist in deciding the appropriate method of induction for you.

## **Methods of Induction:**

### **Propess (Prostaglandin) Pessary**

Usually a Propess vaginal pessary will be used. This helps to soften your cervix, encourage labour to begin or enable your waters to be broken.

Following insertion of the pessary you will remain on the bed and your baby’s heart rate will be monitored for a minimum of 40 minutes.

The propess pessary will stay in place for 24 hours or until you are in definite labour. You will be able to move around normally during this time.

After using Propress it is very common to experience tightening of the womb sometimes with or without discomfort and pain. Often this is not labour but effects of the cervix absorbing the Pessary and is very normal.

### **Prostin (Prostaglandin) 1mg Gel**

Women having their 4<sup>th</sup> and subsequent pregnancy Prostin 1mg gel will be used. This will require more regular observations of baby's heart rate and more than one dose may need to be used.

### **Breaking Your Waters**

If it is possible to do so, your waters will be broken during a vaginal examination. (Technically known as A.R.M. – Artificial Rupture of Membranes.) This may be during the first vaginal examination or following the use of prostaglandin.

If you do have your waters broken your baby's heart rate will be monitored for a minimum of 40 minutes. Then you will be allowed to mobilise freely.

### **Will you need any other help?**

If after having your waters broken and labour has not commenced after the planned time, you will have further assistance from a Syntocinon drip (infusion). This will be given via a vein in your arm.

Syntocinon is a substance produced naturally in labour; it will help to get the contractions to start and speed up labour.

Once Syntocinon has been started your baby's heart rate will be monitored continuously until birth.

### **Pain Relief**

We would not normally expect you to need pain relief until labour is established, but pain relief is available throughout induction, if needed. You should discuss this with your midwife.

### **Are there any risks?**

Occasionally some women experience rapid onset of contractions in reaction to either Prostaglandin or Syntocinon and may require a drug given by injection to stop the contractions. If this happens with the pessary it would be removed or the Syntocinon infusion stopped.

Following prostaglandin being given, some women do not go into labour and are not able to have their waters broken. In these cases women may need to have a Caesarean section delivery of their baby. This will be fully discussed with you by a Senior Obstetrician.

### **Can your partner or companion be with you?**

Yes, your partner or named companion may stay with you during the induction period. However, it is expected, that if you are not in established labour when normal visiting ends, that all visitors will go home.

### **Eating and Drinking**

You will be offered a light diet during the induction. We advise you to drink fluids (mainly water) as this will help you avoid getting dehydrated.

### **IMPORTANT INFORMATION CONCERNING YOUR INDUCTION OF LABOUR**

As we are unable to predict the workload in Maternity, women who are booked for Induction of Labour must contact the Obstetric Unit before travelling to the hospital.

We understand that any delay may cause anxiety, therefore we would like to inform all women who are due to attend for this procedure that there is a possibility that their induction may not start as soon as they arrive at the Unit. It may have to be delayed until later in the day or occasionally be postponed to the following day.

Please telephone

**01384 456111 ext 3050**  
**At 10.30am**

On the morning of the planned induction to check that admission is possible. If there is not a bed available at that time, you will be advised to come in for monitoring of your baby's heart rate either on Obstetric Unit or on the Day Assessment Unit. If following this monitoring admission it is still not possible, you will be advised to return home and to ring at a later confirmed time unless a midwife has contacted you before that time.

We apologise in advance for any inconvenience this may cause.

This leaflet provides information about your choice of care in pregnancy. If you want more information in other languages please contact a midwife on 01384 456111

This booklet was published in 2011 by  
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Available in larger print and audio version

– call 01384 244418

Trust Headquarters  
Russells Hall Hospital  
Dudley  
West Midlands  
DY1 2HQ

Date: 29/05/2013

**FREEDOM OF INFORMATION ACT 2000 - Ref: FOI/011447**

With reference to your FOI request that was received on 01/05/2013 in connection with 'Induction of labour'.

Your request for information has now been considered and the information requested is below.

**I would be grateful if you could provide me with the following information:**

**Copies of any guidelines or protocols currently in use within your Trust which are relevant to the Induction of Labour in pregnant women.**

Please find your response attached

Further information about your rights is also available from the Information Commissioner at:

**Information Commissioner**

Wycliffe House  
Water Lane  
Wilmslow  
Cheshire SK9 5AF  
Tel: 0303 123 1113  
Fax: 01625 524510  
[www.ico.gov.uk](http://www.ico.gov.uk)

Yours sincerely

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