

	DIVISIONAL DOCUMENT
Delete as appropriate:	Guideline
DOCUMENT TITLE:	Induction of Labour using Propess/Prostin/Balloon Catheter
DOCUMENT NUMBER:	G9 v5.1
DOCUMENT REPLACES Which Version	G9 v5
LEAD EXECUTIVE DIRECTOR DGM	Divisional Director – Family Care Division
AUTHOR(S): Note should <u>not</u> include names	Consultant

TARGET AUDIENCE:	Midwives & Obstetricians
DOCUMENT PURPOSE:	To describe the management of induction of labour using Propess, Prostin and balloon catheter.

	ELHT Maternity Services Clinical Guideline 5: Antenatal Fetal Surveillance ELHT Maternity Services Clinical Guideline 7a: Prelabour rupture of membranes at term
To be read in conjunction with	ELHT Maternity Services Clinical Guideline 7b: Prelabour rupture of membranes (PROM) ELHT Maternity Services Clinical Guideline 13: Breech and ECV ELHT Maternity Services Clinical Guideline 18: Management of pre- gestational and gestational diabetes
	ELHT Maternity Services Clinical Guideline 20: Management of Stillbirth ELHT Maternity Services Clinical Guideline 42: Vaginal Birth after Caesarean Section ELHT Maternity Services Clinical Guideline 86: Outpatient Induction of Labour
SUPPORTING REFERENCES	NICE guideline Inducing Labour NG207 Published: 04 November 2021

CONSULTATION			
	Committee/Group	Date	
Consultation	Guideline Group	Sept 2022	
Approval Committee	Women and Newborn QSB	Sept 2022	
Ratification date at WNQSB	8 <sup>th</sup> September 2022		
NEXT REVIEW DATE:	Sept 2025		
AMENDMENTS:	September 2022 Pg 8: Offer membrane sweep to all women aiming for vaginal birth from 39+0 weeks gestation		
	Appendix 1 amended to offer sweep from 39+0 weeks gestation		

## Contents

Introduction	4
Antenatal actions	4
Information for women and discussion about IOL	4
Indication for IOL	5
Booking an Induction of Labour	9
Membrane Sweep	9
Induction of Labour on the Antenatal Ward	10
Balloon Induction	11
Pain Relief	16
Prevention and Management of Complications	16
Appendix 1: Pathway For Propess Induction Of Labour For Low Risk Women	

Page **3** of **18** 

#### Introduction

Induction of labour (IOL) is the initiation of uterine contractions prior to the onset of spontaneous labour, leading to cervical effacement and dilatation and the birth of the baby. IOL is a significant intervention in a pregnancy. Risks, benefits and alternatives should always be discussed with the woman.

#### Antenatal actions

Discuss preferences about mode of birth with women early on in their pregnancy (As per ELHT Maternity services standard operating procedure 61: Individual Birth choices/Place of birth options-Individualised care and support plan).

Take into account their individual circumstances, and discuss that options for birth can include:

- expectant management, or
- induction of labour, or
- planned caesarean birth

Confirm a woman's preferences for birth at antenatal visits towards the end of pregnancy, as these may have changed since earlier discussions.

Record all discussions on BadgerNet/Written notes and update individualised management plans accordingly.

#### Information for women and discussion about IOL

Discuss with the 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 and pain relief
- the alternative options if the woman chooses not to have induction of labour, or decides at a later stage that she no longer wishes to proceed with the induction process
- the risks and benefits of induction of labour in specific circumstances, and the proposed induction methods
- that induction may not be successful, and how this would affect the woman's options

Explain to women that:

- induction of labour is a medical intervention that will affect their birth options and their experience of the birth process.
- vaginal examinations to assess the cervix are needed before and during induction, to determine the best method of induction and to monitor progress
- their choice of place of birth will be limited, as there may be recommended interventions (for example, oxytocin infusion, continuous fetal heart rate monitoring and epidurals) that are not available for home birth or in Midwifery-Led Birth Centres
- there may be limitations on the use of a birthing pool
- there may be a need for an assisted vaginal birth (using forceps or ventouse), with the associated increased risk of obstetric anal sphincter injury (for example, third- or fourth-degree perineal tears)
- pharmacological methods of induction can cause hyperstimulation this is when the uterus contracts too frequently or contractions last too long, which can lead to changes in fetal heart rate and result in fetal compromise
- an induced labour may be more painful than a spontaneous labour
- their hospital stay may be longer than with a spontaneous labour. An induction of labour can take several days in some cases

• there may be delays in the induction process, such as a delay in the transfer to Central Birth Suite (CBS) for artificial rupture of membranes (ARM), if there is high activity and acuity within the unit.

Provide the patient information leaflet on Induction of Labour (paper copy or on BadgerNet) and on membrane sweep and balloon induction if required.

Give women time to discuss this information with others if they wish to do so before making a decision. Ensure women have the opportunity to ask questions, and time to think about their options.

Respect the woman's decision, even if healthcare professionals disagree with it, and do not allow personal views to influence the care they are given. Record the woman's decision in her notes.

Be aware that the available evidence does not support the following methods for induction of labour:

- herbal supplements
- acupuncture
- homeopathy
- castor oil
- hot baths
- enemas
- sexual intercourse.

#### Indication for IOL

INDICATION	RECOMMENDATION	INFORMATION FOR
		WOMEN
POSTDATES/PREGNANCY	Give women with	Explain to women that
LASTING LONGER THAN	uncomplicated pregnancies	labour usually starts
41 WEEKS	every opportunity to go into	naturally before 42+0
	spontaneous labour.	weeks, based on the
		gestational age estimated
	Offer IOL at 41+0 following	by their dating scan.
	a discussion about their	
	risks and benefits and	Explain that pregnancy
	potential impact on birth	continuing beyond 41+0
	experience. Women may	may increase the risk of:
	choose a later induction.	-Caesarean section
		-Neonatal Intensive care
	Low risk women can be	Unit (NICU) admission
	counselled by midwifes.	-Stillbirth and Neonatal
	Outpatient induction should	death
	be offered as standard	
	practice for these women.	IOL from 41+0 may reduce
	See ELHT Maternity service	these risks but they need to
	clinical Guideline G86:	consider the impact on their
	Outpatient IOL for further	birth experience when
	information.	making this decision.
	Discuss other options	
	including expectant	

Page 5 of 18

	-	r
	management or Caesarean section and record decision in the notes.	
IF POSTDATES IOL IS DECLINED	Offer a follow up appointment to discuss this again and review her decision. Offer twice weekly Cardiotocograph (CTG) arranged through the Antenatal Day Unit (ADU) and weekly liquor volume and doppler ultrasound assessment from 42weeks. Advise women to contact their midwife or maternity	Advise women that: • monitoring only gives a snapshot of the current situation, and cannot predict reliably any changes after monitoring ends, but provides information on how their baby is at the moment and so may help them make a decision on options for birth • adverse effects on the haby (including stillbirth)
	their midwife or maternity unit if they change their mind before their next appointment, or as soon as possible if they have concerns about their baby (for example reduced or altered fetal movements).	baby (including stillbirth), and when these events might happen, cannot be predicted reliably, or prevented even with monitoring
PRETERM PRELABOUR RUPTURE OF MEMBRANES	See ELHT Maternity services Guideline 7b: Pre labour Preterm Rupture of membranes (P- PROM)	
PRE-LABOUR RUPTURE OF MEMBRANES AT TERM	See ELHT Maternity services guideline Guideline 7a: Pre labour Rupture of membranes at Term	
PREVIOUS CAESAREAN SECTION	See women aiming for vaginal birth after caesarean section (VBAC) in ANC at 39 weeks gestation and offer membrane sweep, assess their suitability for IOL and discuss options. If birth needs to be expedited, offer women who have had a previous caesarean birth a choice of: • induction of labour, <b>or</b> • planned caesarean birth. Induction with balloon catheter is first line.	Advise women who have had a previous caesarean birth that: • induction of labour could lead to an increased risk of emergency caesarean birth • induction of labour could lead to an increased risk of uterine rupture • the methods used for induction of labour will be guided by the need to reduce these risks (for example, by using mechanical methods).

Page 6 of 18

	Consider the woman's circumstances and preferences and record the discussions and plan in the woman's notes. Advise women that they can choose not to have induction of labour or caesarean birth, even when it may benefit their or their baby's health.	The likelihood of uterine rupture in women with previous caesarean section undergoing induction of labour is increased to 80 per 10,000 when labour is induced with non- prostaglandin agents and 240 per 10,000 when labour is induced using prostaglandins
MATERNAL REQUEST	If a woman requests induction of labour for a non-clinical reason, she must be referred to and seen by a consultant obstetrician to discuss the benefits and risks, considering the woman's circumstances and preferences.	
BREECH	Induction of labour is not generally recommended if a woman's baby is in the breech position. See ELHT Maternity services Guideline 13: Breech and External Cephalic Version	
FETAL GROWTH RESTRICTION	Timing and mode of delivery are to be made on an individual basis after discussion with a senior Obstetrician. Do not induce labour if there is fetal growth restriction with confirmed fetal compromise. Offer caesarean birth instead. See ELHT Maternity services guideline 68: Detection and management	
SUSPECTED MACROSOMIA/LGA	of fetal growth restriction. For women <u>without</u> diabetes and with suspected fetal macrosomia discuss the options for birth, including expectant management,	ELHT Maternity services guideline 92: Large for Gestational Age Fetus provides information on the risks and benefits of IOL to

	induction of labour or caesarean birth. See ELHT Maternity Services Guideline 92: Large for Gestational Age and complete the Large for Gestational Age proforma. Offer IOL 39-40 weeks. For guidance on suspected fetal macrosomia in women with pre-existing or gestational diabetes see ELHT Maternity Services	aid counselling and support decision making.
	Clinical Guideline 18 a and b: Diabetes in Pregnancy	
HISTORY OF PRECIPITATE LABOUR	Do not routinely offer induction of labour to women with a history of precipitate labour to avoid a birth unattended by healthcare professionals.	
INTRAUTERINE FETAL DEATH	Refer to ELHT Maternity Services Guideline 20: Management of Stillbirth	
DIABETES IN PREGNANCY	Refer to ELHT Maternity Services Clinical Guideline 18 a and b: Diabetes in Pregnancy	
MATERNAL AGE	The option for IOL at 39-40 weeks should be discussed in antenatal clinic.	
IVF PREGNANCIES	Do not routinely offer early induction. Timing of birth should take into consideration individual risk factors and patient choice after discussion in clinic.	There is no clear evidence to support induction of labour for IVF pregnancies.
MATERNAL OBESITY, BMI >35	Offer IOL at Term	Elective IOL at term may reduce risk of Caesarean section, without the increased risk of adverse outcomes. The option of IOL should be discussed with each woman on an individual basis (see ELHT Maternity Services Guideline 39: Management of maternal obesity in pregnancy)

#### Booking an Induction of Labour

Document the booking of IOL on BadgerNet ensuring the 'book induction' page is completed.

Book the induction appointment using the SharePoint calendar or call Antenatal Ward if unable to access this.

- Ensure that there is a correct telephone number documented as this will be used by Antenatal Ward staff if it is necessary to change the time of her appointment
- Ensure that women are booked into the correct appointment slot for the type of IOL they are suitable for: outpatient, inpatient, balloon or direct ARM.
- Women deemed suitable for direct ARM will be contacted by the CBS team on the morning of their appointment to confirm the time to attend.

Complete a prescription for propess, analgesia, terbutaline, antiemetic at the time of booking. If the induction is booked by a midwife, this will be completed by the Obstetric Doctors when the patient attends for induction.

Provide a patient information leaflet on induction of labour, outpatient induction, membrane sweep and balloon induction if required.

Consider whether further appointments are required to allow the opportunity for rediscussing the process and birth plan, or for further membrane sweep.

#### Membrane Sweep

Research has shown that following a membrane sweep there is a 24% increased chance of delivering within 48 hours, a 46% increased chance of delivering within a week and a 74% reduction in the likelihood of going 2 weeks over dates. The procedure is not associated with any increased risk of infection of the mother or baby, premature rupture of the membranes, forceps or caesarean section.

Offer membrane sweeps to:

- all women aiming for vaginal birth from 39+0 weeks gestation
- assess the cervix in order to make a clinical decision on favourability for induction of labour
- encourage spontaneous labour prior to IOL

Explain to women:

- that membrane sweeping might make it more likely that labour will start without the need for additional pharmacological or mechanical methods of induction
- that pain, discomfort and vaginal bleeding are possible from the procedure.
- Provide an information leaflet and ensure verbal consent is obtained.

The procedure:

- A midwife can perform a membrane sweep prior to 39 weeks if clearly documented by a senior doctor (ST3+/Senior clinical fellow/Consultant) in the antenatal notes.
- Check that there is no evidence of a low-lying placenta on previous ultrasound scans before membrane sweeping.

- Check for cephalic presentation, engagement, auscultate the fetal heart rate with a Pinard stethoscope or hand-held Doppler device and document findings. Only proceed with a membrane sweep if these are normal.
- Use sterile gloves and sterile gel
- After the membrane sweep auscultate the fetal heart rate using Pinard stethoscope or hand-held Doppler device, documenting the rate along with the findings of the vaginal examination.
- Signpost the woman to the contact details of Antenatal Triage and CBS in case of any concerns following the procedure.
- If there is any unexpected event during the process such as excessive bleeding, ruptured membranes or abnormal fetal heart rate then transfer to Triage or CBS.
- Discuss with women whether they would like to have additional membrane sweeping if labour does not start spontaneously following the first sweep.

There is limited evidence to suggest the frequency of membrane sweeps. The number of sweeps should be a joint decision between the woman and her midwife. However a minimum of 48 hours should be left between examinations if labour does not start spontaneously. Routinely offer a further sweep in 1 week.

### Induction of Labour on the Antenatal Ward

On the day of admission, women are advised to attend the Antenatal Ward at the time of their given appointment. If it is necessary to change their appointment time they will be contacted by Antenatal Ward staff.

Women who are deemed to be suitable for direct ARM, will be contacted by the CBS team to arrange a time for admission.

#### On Admission:

- Review notes and confirm indication for induction of labour and patient consent and that there is no evidence of low-lying placenta on previous scans
- Record Maternal Observations (using MEOWS)
- Assess fetal lie, presenting part and engagement. Ultrasound scan should be performed if there are any concerns about the position of the baby
- Perform a CTG to assess the fetal heart rate and pattern of uterine activity.
- In the absence of regular uterine activity and/or abdominal pain, a computerised CTG should be used. If regular uterine activity or pain is present, standard CTG assessment and interpretation using an antenatal CTG proforma should be used.
- The CTG should be a normal antenatal classification, with criteria met if using computerised CTG, prior to commencing IOL.
- In order to proceed with IOL, an absence of significant uterine contractions (not Braxton-Hicks) must be confirmed.

#### Method of induction:

Discuss with women the risks and benefits of different methods to induce labour. Include:

- the risk of hyperstimulation with Prostin gel and Propess
- when using pharmacological methods of induction, uterine activity and fetal condition must be monitored regularly
- if hyperstimulation does occur, the induction treatment will be stopped by giving no further medication, or by removal of vaginally administered products when possible
- there are differences in the ease with which different vaginal products can be removed (for example Propess can be removed more easily than Prostin gel). Our first line choice is Propess.
- hyperstimulation can be treated with tocolysis

• mechanical methods are less likely to cause hyperstimulation than pharmacological methods.

Perform a vaginal examination to assess the readiness of the cervix. This initial examination can be performed by a suitability trained midwife or Obstetrician.

	0	1	2	3	Score
Dilatation	0-1cm	1-2cm	3-4cm	>4cm	
Position of cervix	Post	Mid	Anterior	Anterior	
Length of cervix	2-3cm	1-2cm	0-1cm	Very Thin	
PP (station)	-2	-1	level	Below Spines	
Consistency	Firm	Soft	Very Soft	Very Soft	

Record Findings on BadgerNet and include a Bishop score.

	0	
	BISHOPS SCORE	BISHOPS SCORE
	6 or less	More than 6
Previous caesarean section	Offer Balloon IOL first line	Amniotomy =/-Syntocinon
or Grandmultip (Para 5 or more)		(See ELHT Maternity Services Guideline 69: Induction of labour with artificial rupture of membranes and/or use of Oxytocin).
<ul> <li>All other women without these contraindications:</li> <li>Painful regular uterine contractions, whether or not there is cervical change</li> <li>Glaucoma or raised intraocular pressure</li> <li>Severe asthma</li> <li>Major uterine surgery e.g. hysterotomy, myomectomy, perforation</li> </ul>	Offer Propess induction first line unless woman chooses mechanical method	Amniotomy =/-Syntocinon (See ELHT Maternity Services Guideline 69: Induction of labour with artificial rupture of membranes and/or use of Oxytocin).

#### Balloon Induction

Inclusion criteria:

- Intact membranes
- Singleton cephalic pregnancy with the head fixed in the pelvis
- Cervix is not open enough for artificial rupture of membranes
- 37-42 weeks gestation
- Trained staff available to insert the balloon catheter
- Woman has read and understood the patient information leaflet.

#### Exclusion criteria:

- High head
- Unstable lie/non cephalic presentation
- Pre-labour rupture of membranes
- Woman declines balloon induction and wishes to proceed with prostaglandin induction
- Cervix open enough to proceed with ARM

#### Process of Induction of Labour with Foleys Catheter

- When the woman attends for IOL, confirm that she still wishes to proceed
- Undertake CTG monitoring immediately prior to insertion using computerised CTG if there is no uterine activity or abdominal pain, or standard antenatal CTG assessment and interpretation if uterine activity is present.
- Insertion of the balloon catheter can be undertaken by obstetric doctors or midwives who have been trained or are being supervised by someone who is competent in insertion.
- The procedure should be performed under aseptic conditions and be clearly documented
- Perform a vaginal examination to ensure that the cervix is not already suitable for artificial rupture of membranes
- Insertion can be performed either by direct visualisation with the woman in lithotomy, using a speculum or by feel.
- Equipment:
  - Foley catheter with 30ml balloon
  - Speculum
  - Sponge holding forceps
  - Sterile gloves
  - Sterile towel
  - 30ml sterile water
  - 2 x 20 ml syringes
  - Spigot
  - Tape
  - Light source

Insertion by feel:

- Perform a vaginal examination
- Find the cervix
- Use fingers to advance the catheter so that the balloon sits at the internal os
- Inflate the balloon to 30ml
- Tape the end of the catheter to the patient's inner thigh under slight tension

Insertion under direct vision

- Insert speculum and visualise the cervical os
- Use sponge holder to guide the catheter through the os
- Inflate the balloon to 30ml
- Tape the end of the catheter to the patient's inner thigh under slight tension

#### **Post Procedure**

• A CTG should be performed immediately following insertion. If no uterine activity is present, computerised CTG can be used. If uterine activity is present, standard antenatal CTG assessment and interpretation should be used for a minimum of twenty minutes.

- When uterine contractions commence following insertion of a balloon catheter, assess the fetal heart rate via CTG using an intrapartum CTG review tool: 0
  - If the CTG is normal, review the individual circumstances and,
    - if considered low risk, use intermittent auscultation unless there are clear indications for further CTGs.
    - if considered high risk, continue the CTG until contractions settle or transfer to CBS is deemed appropriate.
- If there is excessive pain, bleeding or rupture of membranes the Foley's catheter should be removed, a CTG commenced (intrapartum CTG review tool) and an obstetric review sought.

#### **Removal of Balloon Catheter**

- The balloon catheter should be left in until the catheter falls out or up to a maximum of 24 hours.
- A vaginal examination should then be performed to assess for the suitability for ARM
- For women with significant issues affecting their pregnancy or wellbeing (such as severe pre-eclampsia or severe growth restriction), vaginal examination can be considered earlier (after 6-12 hours) to see if artificial rupture of the membranes is possible. Leave the balloon in situ for these examinations.
- If the cervix has dilated it may be possible to remove the balloon during digital examination without deflating it. If not, then deflate the balloon using a syringe to remove the water prior to removal.
- If rupture of membranes occurs, the balloon should be deflated and removed • immediately, syntocinon can be started when is safe to do so.

If not suitable for ARM 24 hours after balloon insertion, a further 12 hours of Propess can be considered after review by an Obstetrician.

#### Prostaglandin Induction

#### Insertion of Propess pessary

- Undertake CTG monitoring immediately prior to insertion using computerised CTG if there is no uterine activity or abdominal pain, or standard antenatal CTG assessment and interpretation if uterine activity is present.
- Use Propess soon after removing from freezer
- Insert Propess high into the posterior fornix using aquagel
- Propess may be more effective if folded on itself with a short "tail" and place transversely in the posterior fornix.
- Any remaining tape should be folded inside the vagina when fingers have been • removed, to avoid the woman tugging on it when she wipes herself.
- The women should lie on the bed for a minimum of 30 minutes after insertion of the • pessary, during which a standard antenatal CTG should be performed.
- Computerised CTG must not be used following the use of Propess, even if there is • no uterine activity.
- In the absence of uterine activity, auscultation of the fetal heart rate should be offered • every four hours to assess fetal wellbeing. CTG should be commenced if concerns are identified in the fetal heart rate during auscultation including, but not limited to, abnormal baseline rate (<110bpm, >160bpm), a rise in fetal heart rate (requires review of previous rates), decelerations.
- When uterine contractions begin after administering Propess, the CTG should be repeated and an intrapartum CTG review tool used to assess and interpret the fetal heart rate pattern irrespective of cervical dilatation:

- o If the CTG is normal, review the individual circumstances and,
  - if considered low risk, use intermittent auscultation unless there are clear indications for further CTGs.
  - if considered high risk, continue the CTG until contractions settle or transfer to CBS is deemed appropriate.
- If the CTG is not normal, continue the CTG, remove the Propess, obtain an urgent obstetric review and consider if terbutaline is required. In cases of significant fetal heart rate abnormality, transfer to CBS immediately.
- If the woman experiences no backache or tightenings after 8 hours of Propess, it is worthwhile to check that the pessary is still in the posterior fornix.
- Document on the prescription chart and BadgerNet

Women should be advised to inform staff if the Propess falls out or they have:

- Ruptured membranes
- Pain
- Bleeding
- Reduced movements

A full holistic review including assessment of maternal and fetal wellbeing should be undertaken.

#### When should Propess be removed?

Propess should be removed:

- after 24 hours, however, may remain in-situ if there is a delay in review and no concerns with fetal and maternal well-being. Propess is only licensed for 12 hours when used for ripening post spontaneous rupture of membranes (SROM), therefore woman should be transferred to CBS for augmentation after 12 hours.
- painful regular contractions, that has led to a change in the Bishop's Score(BS) from the original score BS ≥ 6
- if there is evidence of uterine hyperstimulation
- concerns about the fetal heart rate / CTG
- vaginal bleeding
- there is evidence of maternal allergy or hypersensitivity.

If unable to remove or locate the Propess perform a speculum examination.

#### 24 hour Propess review

This review and FIRST dose of prostin following propess can be performed by a trained senior midwife or Obstetrician.

Assess maternal observations, contractions, pain, CTG. Trained midwife or obstetrician to remove propess and perform cervical assessment.

Bishop's Score ≥6:

• transfer to CBS for ARM ± syntocinon

Bishop's Score <6:

- administer 1mg Prostin gel PV into posterior fornix. Perform a standard CTG immediately following insertion for a minimum of thirty minutes using an antenatal CTG review tool if there is no uterine activity or an intrapartum CTG review tool if contractions are present.
- Reassess in 6 hours for either 2<sup>nd</sup> dose of Prostin (as above) or ARM.
- A third dose of Prostin (as above) can be considered after review and examination by an obstetrician.

# What should be done if there is a spontaneous rupture of membranes with Propess in the vagina?

- Commence CTG
- Confirm SROM clinically or with an Amniquick
- Assess contractions
  - o 4 or more in 10 minutes do a cervical assessment, remove Propess, perform CTG. If BS≥ 6 transfer to CBS.
  - <4 in 10 mins leave Propess in place, perform maternal observations and CTG and reassess at 24 hours after insertion as per normal pathway.

#### What to do if propess falls out?

- maternal observations, recorded on MEOWS chart
- review of uterine activity
- review of pain
- review of loss PV
- Perform CTG monitoring

If maternal and fetal wellbeing are confirmed and there is no significant uterine activity or ruptured membranes then re-insert Propess and continue for the full 24 hours from the original start time.

#### Monitoring for Propess and inpatient balloon inductions

4 hourly

- maternal observations, recorded on MEOWS chart
- review of uterine activity
- pain
- loss PV
- fetal movement
- fetal heart rate via auscultation

When uterine contractions begin during the induction process assess fetal wellbeing and uterine contractions, perform CTG monitoring and use the intrapartum CTG review tool

CTG	Low Risk Women	High risk women
Normal	Discontinue CTG and use intermittent auscultation unless membranes have ruptured and the presenting part is not stable or well applied to the cervix.	Continuous CTG and transfer to CBS for ongoing IOL/monitoring
Abnormal CTG or excessive uterine contractions	<ul> <li>Inform Obstetrician on-call</li> <li>continue cardiotocography</li> <li>remove Propess or balloon</li> <li>administer terbutaline 250micrograms sc if contracting &gt;4 in 10 and CTG abnormal</li> </ul>	

#### Pain Relief

Explain to women that induced labour may be more painful than spontaneous labour. Discuss the available pain relief options in different settings with women.

During induction of labour, provide women with the pain relief appropriate for them and their pain. This can include simple analgesia, labour in water and epidural analgesia.

Provide support and pain relief appropriate for the woman and her pain, as required. This includes:

- TENS
- Bath
- Paracetamol and codeine
- Diamorphine

Labouring in water is recommended for women undergoing induction of labour. This includes women not only on the low-risk pathway for post-maturity but the use of the pool with telemetry can be considered for women who would require continuous monitoring in labour

#### Prevention and Management of Complications

#### **Hyperstimulation**

Signs of hyperstimulation are:

- fetal distress
- too frequent contractions i.e., more than one in three minutes
- elevation of baseline tone, i.e., resting pressure between contractions increased
- coupling of contractions
- prolonged contractions

If hyperstimulation is suspected:

- Remove Propess
- Perform CTG, If abnormal then administer terbutaline 250micrograms subcutaneously and transfer to CBS. Alternatives include GTN spray 2 puffs sublingually, Oral Nifedipine 10mg repeated after 20 mins if necessary
- Inform obstetric team

#### Unsuccessful IOL

Obstetric review to:

- Fully reassess the woman's condition and the pregnancy in general.
- Review CTG
- Discuss and agree a plan for further management with the woman considering the clinical circumstances and her preferences. Management options include:
  - o balloon insertion
  - o offering a rest period if clinically appropriate with reassessment
  - o further attempts to induce labour if no change during rest period
  - expectant management
  - o caesarean birth

#### Appendix 1: Pathway For Propess Induction Of Labour For Low Risk Women

#### Antenatal actions:

#### IN EARLY PREGNANCY

- Discuss birth options and offer place of birth leaflet
- Update 'Things to do list' on BadgerNet to include rediscussing birth choices and membrane sweep choices at 35-36 weeks gestation.

#### At 36 WEEKS

- Give membrane sweep leaflet to all women aiming for vaginal birth.
- Offer membrane sweep from 39+0 weeks gestation and offer repeat at weekly intervals. Discuss option for induction of labour at 41 weeks
- Ensure she has access to induction of labour and outpatient induction of labour leaflets.
- Record discussion in notes.

#### Eligibility criteria for low risk and outpatient induction: **Booking process:** Intended place of birth is Ensure women have read and understood the patient information birth centre leaflets and induction process and consent to IOL. Document this in Low risk pregnancy, no notes. medical, gynaecological or obstetric problems Confirm eligibility for low risk/outpatient induction 41+0-42+0 weeks gestation Book a date and time using the Induction of Labour Calendar on BMI<35 sharepoint. If unable to access this then telephone the Antenatal Age <40 Ward 01282 805194 to book. Has transport and lives within 30 mins of the Women should be told to attend the Antenatal Ward at the time of hospital their appointment. They will be telephoned by ward staff if a change Has telephone available in time is required. Can communicate with staff once she gets home (no significant language or other Bed availability on the day? barrier) Has support person able to No Yes stay with her at home On Call Consultant to Triage all women's On admission: Notes to be reviewed by midwife in notes if NO beds available for all IOLs in charge on antenatal ward to confirm suitability for low order to prioritise admissions. IR1 to be risk pathway. completed Follow outpatient IOL pathway unless the woman has Antenatal ward staff to contact women and opted for inpatient induction. inform them when to come in or that they Once there is REGULAR uterine activity even when will be contacted when a bed becomes cervical dilatation is not 4cm consideration should be available. Inform women to contact either given to transfer to Burnley birth centre PLEASE antenatal ward or Triage if any concerns ENSURE THAT PROPESS IS REMOVED prior to transfer