



## CLINICAL GUIDELINES

# Induction of Labour using a Double Balloon Catheter

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

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<b>Does this version include changes to clinical advice:</b>	Yes
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<b>Approval Group:</b>	: Obstetrics Clinical Governance Group

### Important Note:

The Intranet version of this document is the only version that is maintained. Any printed copies should therefore be viewed as 'Uncontrolled' and as such, may not necessarily contain the latest updates and amendments.

## Induction of Labour using a Double Balloon Catheter

The aim of this technique is to facilitate induction of labour in women with an unfavourable cervix. The double cervical ripening balloon mechanically dilates the cervix whilst also stimulating local prostaglandin release. As described in the NICE interventional procedures guidance IPG528 in 2015; the procedure has been shown to be safe, effective and well tolerated.

Compared to cervical ripening with vaginal prostaglandins, use of the double balloon catheter has been found to have:

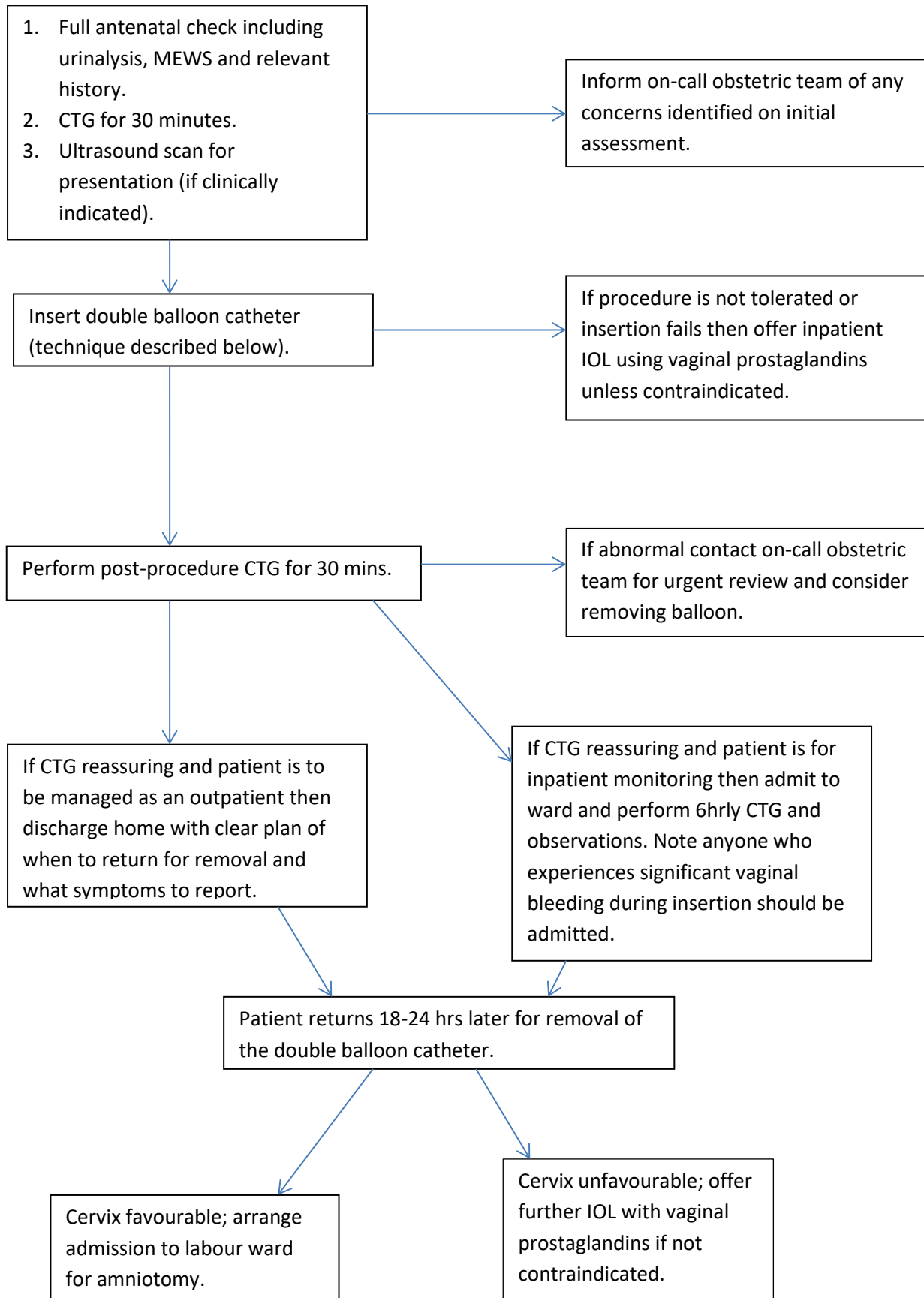
- Lower pain scores reported by women.
- No increased risk of maternal or neonatal infection.
- Reduced risk of uterine hyperstimulation and fetal distress.
- No increased risk of caesarean section.
- No increased risk of neonatal adverse events.

The procedure is suitable for both inpatient and outpatient induction of labour at gestations  $\geq 37+0$ wks. For less than 37 weeks gestation, discuss with on call senior obstetrician.

<b>Indications for <i>inpatient or outpatient</i> IOL using double balloon catheter</b>	<b>Indications for <i>inpatient only</i> IOL using double balloon catheter</b>	<b>Contraindications to IOL using double balloon catheter</b>
<ul style="list-style-type: none"> <li>• Post-dates (40+12 )</li> <li>• Maternal age <math>\geq 40</math> yrs</li> <li>• Pregnancy as a result of assisted conception</li> <li>• Obstetric cholestasis with bile acids <math>&lt; 60 \mu\text{mol/L}</math></li> <li>• Estimated fetal weight <math>&gt; 97^{\text{th}}</math> centile</li> <li>• Gestational diabetes not on insulin</li> <li>• Maternal request for IOL</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced fetal movements</li> <li>• One previous caesarean section</li> <li>• Multiple pregnancy</li> <li>• Late post term (<math>&gt; 40+12</math>)</li> <li>• Estimated fetal weight <math>&lt; 3^{\text{rd}}</math> centile</li> <li>• Abnormal fetal Dopplers</li> <li>• Oligohydramnios (DVP <math>&lt; 2\text{cm}</math>)</li> <li>• PIH/pre-eclampsia</li> <li>• Gestational diabetes on insulin</li> <li>• Type 1 or Type 2 Diabetes</li> <li>• BMI <math>&gt; 40</math></li> <li>• Parity <math>\geq 4</math></li> <li>• Patients on therapeutic LMW heparin during pregnancy</li> <li>• Poor obstetric history</li> <li>• Obstetric cholestasis with bile acids <math>\geq 60 \mu\text{mol/L}</math></li> </ul>	<ul style="list-style-type: none"> <li>• Non cephalic presentation</li> <li>• Ruptured membranes</li> <li>• Placenta praevia</li> <li>• Abnormal CTG</li> <li>• Maternal concerns requiring immediate delivery</li> <li>• Fetal head not engaged in pelvis</li> <li>• Vaginal bleeding within last two weeks</li> <li>• Polyhydramnios (DVP <math>&gt; 8\text{cm}</math>)</li> <li>• Greater than 1 previous caesarean section</li> <li>• Intra-uterine fetal death</li> </ul>

Please note the above lists are not exhaustive. For all women in whom an outpatient IOL is planned the following requirements must be met: good understanding of English, telephone contact, lives within 40 minutes of the hospital with transport immediately available, no significant social concerns.

**Procedure on arrival for balloon catheter IOL**



Women should be advised to contact maternity assessment or inform the midwife if they experience any of the following:

- Signs of labour
- Ruptured membranes
- Vaginal bleeding
- Feeling feverish or unwell
- Balloon catheter falls out
- Difficulty passing urine
- Persistent pain or discomfort
- Change in fetal movements\*

These women should have a prompt obstetric review and have the balloon catheter removed. If the balloon catheter has dislodged then assess suitability for amniotomy. If they remain unfavourable then offer vaginal prostaglandins if not contraindicated. Do not reinsert a further balloon catheter.

\*Patients with a change in fetal movements should be invited into Maternity assessment/triage for CTG. If CTG is normal leave the balloon catheter in place and continue the remainder of the IOL as an inpatient with 6 hourly CTGs.

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**Title: Induction of Labour using a Double Balloon Catheter**

**Implementation /Review Dates**

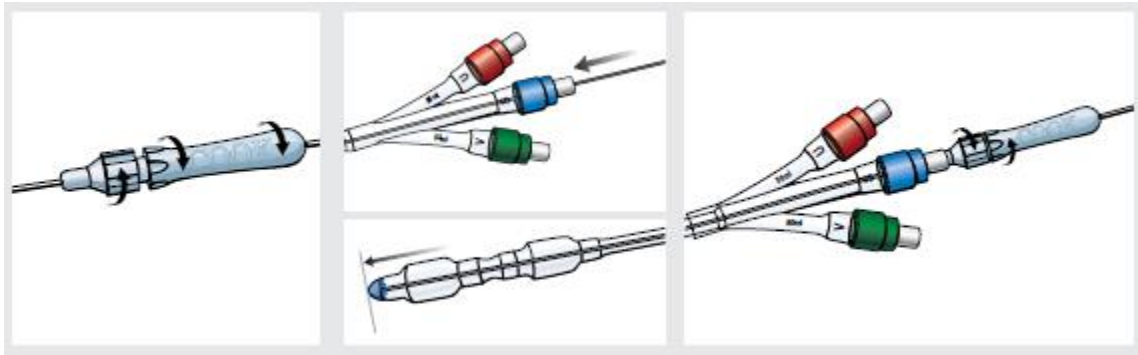
Implemented 02/21

**Review Date: 02/24**

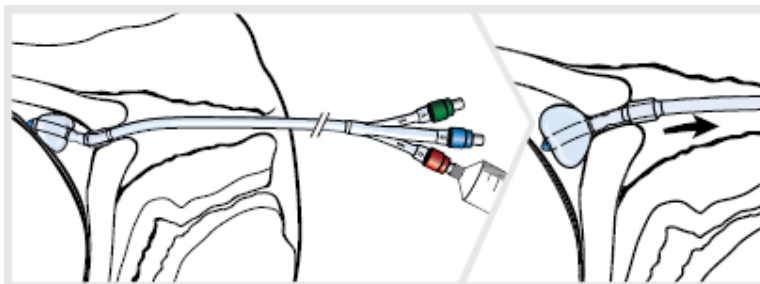
**Approval: Obstetric Guideline Group: 02/21 (updated June 2021)**

### Technique for insertion of the Cook Cervical Ripening Balloon

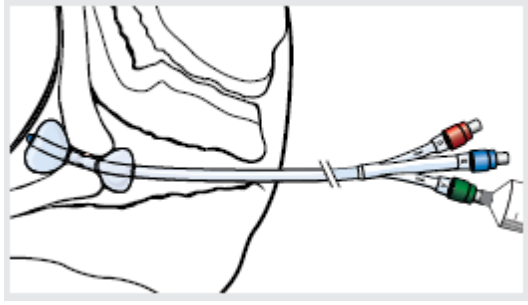
1. Offer suitable analgesia such as Entonox.
2. Place patient in lithotomy with end of bed removed.
3. Clean perineum with sterile water and insert sterile speculum to visualise cervix.
4. Clean the cervix with sterile water and grasp with Rampley's sponge holding forceps.
5. Loosen the fitting on the proximal hub of the Cooks balloon and adjust the wire so that the tip lies flush with the tip of the balloon then tighten the fitting to secure the wire.



6. Use the stylet to place the balloon through the internal os and then remove the wire before advancing until both balloons are through the internal os.
7. Inflate the uterine balloon with 40mls 0.9% sterile NaCl then pull back until the vaginal balloon is visible outside the external os.



8. Inflate the vaginal balloon with 20mls 0.9% sterile NaCl then sequentially add more saline to each balloon in turn to a maximum of 80mls per balloon. The catheter can be taped to the patient's thigh.



9. Document in BadgerNet the time of insertion and the volume in each balloon.