Sherwood Forest Hospitals
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TITLE: MECHANICAL INDUCTION OF LABOUR SOP

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Name the documents here or record not applicable *(these are documents which are usually developed or reviewed/ amended at the same time – ie a family of documents)*	
Associated Policy	
Associated Guideline(s)	• Induction of Labour Management Guideline
Associated Procedure(s)	
Associated Pathway(s)	
Other associated documents e.g. documentation/ forms	• Foley balloon catheter induction of labour patient information leaflet

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1.0	June 2024	Not Applicable	• NEW document
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Abbreviations

IOL	Induction of Labour
LSCS	Lower Segment Caesarean Section
VBAC	Vaginal Birth after Caesarean Section
CTG	Cardiotocograph
VE	Vaginal Examination
APH	Antepartum Haemorrhage
SROM	Spontaneous Rupture of Membranes
MEWS	Maternity Early Warning Score
SBU	Sherwood Birthing Unit
WHO	World Health Organisation
RCOG	Royal College of Obstetricians & Gynaecologists
NICE	The National Institute for Health and Care Excellence
PET	Pre-Eclampsia
HT	Hypertension

1. Purpose and Background

Induction of labour is the most commonly performed obstetric intervention and is recommended to women/birthing people when it is assessed that the outcome of the pregnancy will be improved if it is artificially interrupted rather than being left to follow its natural course.

The purpose of this standard operating procedure is to provide a non-pharmacological method of cervical ripening in situations when there are contra-indications to pharmacological agents.

The use of Foley catheter for cervical ripening has been shown to be an efficient method to induce labour, with evidence that its effectiveness is comparable to slow-release vaginal prostaglandin, but with less incidence of uterine hyperstimulation. It has also been compared with the use of a double (Cook catheter) balloon and recent evidence shows no significant difference in time to delivery interval or mode of birth between the two methods. Foley catheter is not currently licensed for IOL, however, they are widely used worldwide to induce labour and is recognised and supported by the WHO, NICE and RCOG.

When compared to prostaglandins, the risk of uterine hyperstimulation is lower with mechanical cervical ripening, which may lower the risk of uterine rupture in women who have had previous LSCS and are aiming for VBAC.

The insertion of the catheter balloon through the cervix is done to aim to promote the onset of labour by applying pressure on the internal cervical os by indirectly increasing the local secretion of prostaglandins and oxytocin, or both. A standard Foley urinary catheter is used, with the balloon inflated in the extra-amniotic space; the catheter is then put under tension to pull back against the cervical os.

The objective in offering this mechanical form of induction of labour is to:

- Reduce the risk of uterine scar dehiscence in previous caesarean section, and potentially increase the number of women who feel comfortable with induction of labour as an option after a previous caesarean section
- Reduce the rates of uterine hyperstimulation associated with fetal heart rate changes that occur from prostaglandin induction of labour.
- Offer alternative methods for women who are recommended induction of labour
- Provide a cost effective method for induction of labour

Advantages

- safe ripening of the cervix without pharmaceutical
- eliminates potential side effects of repeat medications
- easily placed and quickly removed
- increased choice for women

Contra-indications

- Presenting part is not fixed in the pelvis/high presenting part.
- Polyhydramnios
- any contra-indication to induction of labour, as in the Induction of Labour Guideline

2. Stages of the process

This SOP should be used in conjunction with the SFH guideline for Induction of Labour. The woman/birthing person should be informed of the risks and benefits associated with IOL, compared to the risks and benefits of continued pregnancy.

Mechanical IOL patient leaflet should be given to all patients prior to consent being obtained.

On admission, check the pregnancy notes and document the indication for IOL, ensuring there are no contra-indications.

Gain consent to commence the IOL process.

Complete a full set of MEWS.

Encourage the woman/birthing person to empty their bladder.

Perform abdominal palpation to confirm presentation.

Perform computerised CTG to assess fetal well-being, for minimum of 30 minutes and only proceed if CTG is normal.

Equipment required on trolley, using aseptic non-touch technique:

- Sterile gloves
- VE/Catheter pack
- Lubricating gel
- 18 gauge silicone Foley catheter with a 30ml balloon
- 30mls sterile water
- x1 10ml syringe, x1 20ml syringe
- x2 Spigot or cord clamp
- Catheter stabiliser

Perform, with consent, a VE with the woman/birthing person in semi-recumbent position, to assess the cervix prior to insertion of the catheter. Offer Entonox analgesia.

Only proceed if ARM is not easily possible and/or Bishops Score <7. The cervix needs to be open only 0.5cm for it to have a Foley catheter inserted through it.

Pass the Foley catheter through the internal os of the cervix. Approx 5-6cm of the catheter tip needs to be inserted to ensure that the balloon has passed the internal os.

Inflate the balloon with 30mls sterile water slowly, the woman/birthing person may find this a little uncomfortable but it should pass. If painful, STOP, ensure the balloon has passed through the internal os before continuing. Remove if unsure.

Spigot or clamp the catheter.

Gently pull back on the catheter until you feel slight tension. At this point it will be resting at the level of the internal os.

Applying slight traction to the catheter, secure it with a catheter stabiliser to the inner thigh.

If unable to insert the catheter with a VE then it may be necessary to use a speculum to visualise the cervix, and pass the tip of the catheter through the os using sponge-holding forceps.

Repeat computerised CTG to assess fetal wellbeing, for a minimum of 30 minutes. Discontinue only if normal.

Discuss findings with the woman/birthing person and her birth partners. Explain that they should inform midwifery staff if they feel that the traction is lost or if the catheter has fallen out.

Document on patient's BadgerNet maternity records, including the VE tab to generate the Bishops Score, and the appropriate IOL cycle on the BadgerNet IOL pathway.

A wellbeing check should be carried out every (minimum) 12 hours following insertion of the catheter, including maternal observations and a CTG for fetal wellbeing assessment and contraction frequency. This is to be documented on BadgerNet.

Those requiring more frequent maternal observations (PET, gestational HT) should continue to receive 4 hourly MEWS.

Remove the catheter after 24 hours and perform a VE to assess whether ARM is possible. Document on BadgerNet IOL cycle that catheter has been removed, along with VE findings.

If the catheter falls out, then perform a VE to assess whether the cervix is favourable for ARM.

Whilst the patient is awaiting an ARM, (a minimum) 12hourly maternal observations and CTG should be continued.

Commence a CTG and remove the catheter earlier in cases of:

- Hyperstimulation
- Abnormal CTG
- Maternal request
- SROM
- APH

This list is not exhaustive and if there are any concerns then seek an obstetric review immediately. Maternal observations should remain in line with antenatal guidelines.

For ongoing care, please follow Induction of Labour guideline.

If ARM is not possible after 24 hours then seek a obstetric review and plan of care.

In cases where the Foley catheter ruptures the membranes during insertion, an obstetric review should be sought for an ongoing plan. It may be appropriate to refer to the Pre-labour spontaneous rupture of membranes guideline, however it may be more appropriate to continue with the IOL pathway and arrange for transfer to SBU as soon as possible.

3. References

- National Institute for Health and Clinical Excellence (2021) NG207: Induction of labour
- World Health Organisation. Recommendations of Maternal and Perinatal Health 2013
- World Health Organisation. WHO Recommendations for Induction of Labour 2011
- World Health Organisation. WHO Recommendations on mechanical methods for Induction of Labour 2022
- National Institute for Health and Clinical Excellence (2015) Insertion of a double balloon catheter for induction of labour in pregnant women without previous caesarean section.