CERVICAL CATHETERISATION FOR MECHANICAL CERVICAL PREPARATION

This LOP is developed to guide clinical practice at the Royal Hospital for Women. Individual patient circumstances may mean that practice diverges from this LOP.

1. AIM

- Cervical preparation prior to induction of labour

2. PATIENT

- Woman in whom induction of labour is indicated, where cervical catheter is considered the appropriate method of cervical preparation

3. STAFF

- Medical and midwifery staff

4. EQUIPMENT

- Vaginal examination tray
- Cervical catheter
- Syringes
- Sterile water or normal saline
- Lubricating gel
- Aqueous chlorhexidine 0.02%
- Raytec swabs (5 pack)
- Adhesive tape
- Light source
- Cardiotocograph (CTG) machine
- Ultrasound Machine

5. CLINICAL PRACTICE

- Perform midwifery admission on arrival and medical admission in a timely manner
- Review maternal and fetal history from medical record
- Confirm the gestation and indication for induction
- Check for any contraindications
- Give woman information leaflet (Appendix 1)
- Explain the procedure to the woman and her support person, including risks and possible adverse events
- Obtain verbal consent and document in the medical record
- Perform full maternal observations including urinalysis, abdominal palpation and fundal height measurement
- Confirm cephalic presentation with ultrasound and document in medical record (using stamp)
    - if non cephalic presentation discuss further management with consultant.
- Perform CTG and complete antenatal CTG sticker (place on non eMR results mounting sheet) and document in medical record
- Perform vaginal examination (VE) (following verbal consent), on bed where catheter will be inserted. Record VE and Modified Bishop's Score (proceed if MBS <5) using the stamp (place on non eMR results mounting sheet) and in the medical record
- Count Raytec swabs and document on the accountable items sticker
- Check catheter balloon is patent with sterile water or normal saline, prior to insertion)
- Perform cervical catheter insertion with two staff members, one for procedure and an assistant. Catheter insertion can be performed by a doctor or midwife who has been trained in cervical catheter insertion
- Clean vulva with aqueous chlorhexidine 0.02%
- Insert speculum into vagina to clearly visualise the cervix
- Clean vagina and cervix with chlorhexidine 0.02%

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- Pass the catheter through the cervical os with curved forceps
- Inflate the catheter balloon (Foley's 30ml, Cooks 50-80ml each balloon)
- Place a spigot on the end of the catheter
- Remove speculum
- Tape the catheter to leg with gentle tension for maximum effect
- Complete the countable items checklist
- Perform a post-procedure CTG
- Advise woman that a small amount of vaginal bleeding may occur, provide sanitary pad
- Advise woman who is being induced with an uncomplicated pregnancy, and has a normal post-procedure CTG with no exclusions to outpatient management (see educational notes) that she has the option of going home overnight. Ensure woman knows to call her MGP midwife or Delivery Suite if any concerns or at 0600 hours to confirm bed availability and time of admission for assessment and induction
- Give woman going home patient information leaflet "Induction of Labour : Information for Woman Going Home with a Cervical Catheter" (Appendix 2)
- Ensure woman understands she should notify a midwife if an inpatient, or contact her midwife/Delivery Suite and/or return to hospital (if she has returned home overnight) if any of the following occur:
    - Spontaneous rupture of membranes
    - Ongoing fresh vaginal bleeding
    - Labour establishes
    - She has any concerns for herself or fetal movements
- Assess woman who is an inpatient by 0600 hours on the morning of the induction. If the catheter has fallen out, transfer woman to Delivery Suite. If the catheter has not fallen out, give it a gentle tug. If it still does not fall out arrange medical review by day team

6. DOCUMENTATION

- Medical Record
- Accountable Items Record Sticker

7. EDUCATIONAL NOTES

- Contraindications include :
    - Malpresentation [1,2]
    - Placenta praevia [1,2]
    - Ruptured membranes [3]
    - Significant antepartum haemorrhage [1,2,3]
- The cervical catheter works by physically dilating the cervix, disrupting collagen and causing □ocalized inflammation, thereby increasing prostaglandin and/or oxytocin secretion [1,2]
- Variations on the single balloon cervical catheter have been trialled, including use of a double balloon catheter, simultaneous use of prostaglandin and catheter, simultaneous use of oxytocin and catheter, and extra-amniotic infusion of saline through the catheter[3]. None of these variations have been shown to give superior results and the double balloon catheter may lead to increased pain during the cervical preparation phase and urinary retention [1,2]. There is some evidence that using higher single catheter balloon volumes (80ml vs 30ml) decreases the induction to delivery interval and need for oxytocin augmentation [3, 4].
- There is no significant difference in vaginal delivery rates between women who undergo mechanical methods for cervical preparation versus those who undergo chemical methods [1,2]. Initial research suggested a longer induction to delivery interval when using a cervical catheter compared to chemical methods and an increased need for oxytocin augmentation. More recent studies suggest that induction to delivery interval using a cervical catheter is equal or shorter than if using prostaglandin gel [6].

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- The chance of hyperstimulation using a cervical catheter is reported to be <1%, compared to a 4-5% chance of hyperstimulation when using vaginal prostaglandins [1,2]. It is therefore a more suitable cervical preparation method when hyperstimulation or precipitate labour would be particularly disadvantageous
- Unlike for vaginal prostaglandin use, there does not appear to be an increased risk of uterine rupture in woman with previous caesarean delivery using cervical catheter for induction [7]
- Outpatient cervical preparation using a cervical catheter is potentially appropriate for selected women
    - Women who MAY be suitable for outpatient management include:
        - GDM well controlled on diet [6,7]
        - Maternal age <40 [6]
        - Women being induced for logistical/social reasons [7]
        - Women being induced postdates <42 weeks gestation [6,7]
    - Women NOT suitable for outpatient management include:
        - AFI <=5cm or AFI >=25cm [6,7]
        - Fetal congenital anomaly [6,7]
        - Gestational age <37 weeks or ≥ 42weeks [7]
        - Multiple pregnancy [7]
        - Macrosomia [7,9]
        - Malpresentation [6,7]
        - Pre-eclampsia [7]
        - Previous rapid labour [7]
        - Small for gestational age (estimated fetal weight or abdominal circumference <10th centile) [6,7]
        - Vaginal Birth After Caesarean section [8]
        - Woman not wanting to go home [9]
        - Lack of transport [9]
        - Language or communication difficulties [9]
        - Any other fetal or maternal complication that increases the risk of fetal compromise in labour

8. RELATED POLICIES / PROCEDURES / CLINICAL PRACTICE LOP

- Induction of Labour for Women with a Post-Dates Low Risk Pregnancy
- Postdates - Management of pregnancy beyond 41 weeks
- Induction of Labour Policy and Procedure
- Fetal Heart Rate Monitoring – Maternity – MoH GL2018/025
- Accountable Items in the Birthing environment (outside operating theatre)

9. RISK RATING

- Low

10. NATIONAL STANDARD

- Standard 5 – Comprehensive Care

11. REFERENCES

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REVISION & APPROVAL HISTORY
Reviewed and endorsed Maternity Services LOPs 23/3/21
Approved Quality & Patient Safety Committee 17/9/15
Amended June 2018
Minor amendments (addition to 7) following a Grand Round August 2016
Reviewed and endorsed Maternity Services LOPs group 2/9/15
Previously titled '*Foley Catheter for Cervical Ripening'*
Approved Quality & Patient Safety Committee 15/4/11
Reviewed Obstetric Clinical Guidelines Group February 2011
Approved Quality Council 17/3/03

FOR REVIEW : APRIL 202

…/appendices

Appendix 1

Induction of labour – Foley catheter

If you have been advised that you require an induction of labour and your cervix (neck of womb) is not yet open, you will need some help for this to happen. A Foleys catheter will soften and open your cervix so that we can break your waters.

The Foleys catheter is a physical way of opening your cervix that does not require drugs. A speculum is put into your vagina and the catheter, which is a thin soft rubber or silicone tube, is then inserted through your cervix. At the tip of the catheter there is a small balloon which is inflated. This balloon puts pressure on your cervix which allows it to release natural hormones to help it soften, thin and open. The end of the catheter is taped to your thigh and stays in place until the next morning.

This process can be uncomfortable, but is usually eased once the speculum has been removed. You may experience cramping, period type pains and back ache which help your cervix to soften. You will usually be able to sleep through this discomfort which can be settled with the use of hot packs and showers. Sometimes stronger pain relief is required. Once the Foleys catheter has been inserted you can walk around, and go to the toilet normally. There is no need for you to remain in bed.

Most women will not go into labour with the catheter alone but the cervix will still open.

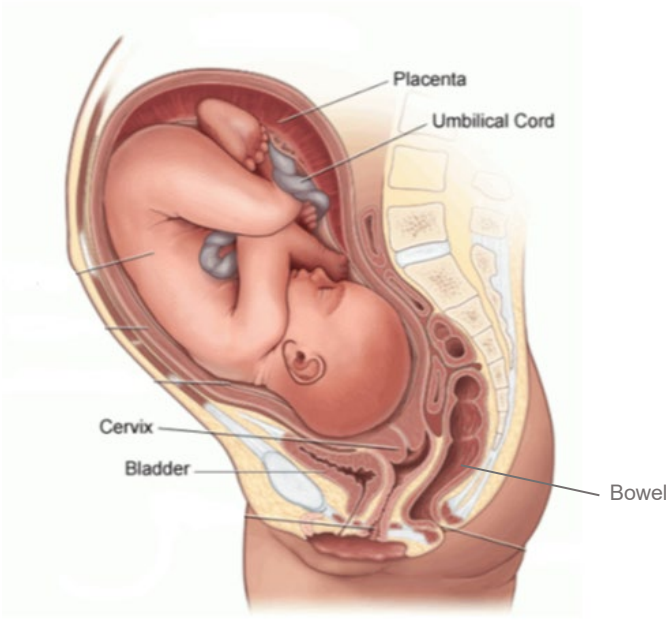
The catheter sometimes falls out during the night, but even if it doesn't, you will be moved to the Delivery Suite the following day to continue your induction. The catheter will be removed there before breaking your waters. Most women will need a hormone (oxytocin) drip to start contractions. The hormone drip and breaking of waters work together to start labour.

Your baby's heart rate will be monitored before and after the catheter is inserted.
You may be required to stay overnight in hospital if you or your baby are needing monitoring.
If you are suitable to go home with the catheter in place, you will be given information about when to contact the hospital.

During the process of getting your cervix open and soft, the midwife will check both you and your baby. We will be observing your baby's heart rate and we need you to tell us if you are experiencing any of the following:

- any change in your baby's movements
- contractions
- bleeding
- waters breaking
- difficulty passing urine (rare)

If you have any specific health problems, concerns or questions please tell your midwife or doctor. Sharing information with us can make a difference in your experience during your hospital stay.



APPENDIX 2

Induction of Labour: Information for a **Woman Going Home** with a Cervical Catheter

- To prepare you for induction of labour, a soft plastic catheter (tube) has been inserted through your cervix and a balloon at the tip of the catheter has been inflated. The balloon of the catheter is sitting at the top of the cervix, and will move through to slowly open the cervix through tension on the tubing.
- The lower part of the catheter tubing has been taped to your inner thigh. Please do not pull or tug on the tubing.
- You have been given a pad to wear after the catheter was inserted as it is common to get some bleeding or discharge. Most women will also experience some cramps.
- The catheter may fall out overnight before you come back to the hospital. The balloon may have some mucus or blood on it, which is common. If the catheter comes out, then please undo the taping on your inner thigh and dispose of the catheter in your normal household rubbish. You do not need to keep the catheter to bring back into the hospital. Please come in to the hospital as planned the next morning. It is not necessary to come back to hospital right away if the catheter falls out, although you are welcome to ring the Delivery Suite or your midwife if you have any concerns.
- If the catheter does NOT fall out overnight, please come into the hospital anyway at the scheduled time. In most cases the catheter will still be ready to come out and your doctor or midwife will be able to start the rest of your induction as planned. Please do not pull or tug on the catheter tubing or attempt to remove the catheter yourself.
- Unless you are allergic to paracetamol, you can take this for pain relief. You can take two tablets every four hours up to a maximum of eight tablets in 24hours. Many women do get cramps and discomfort with the catheter in, and are more comfortable and sleep better after taking the tablets. Paracetamol is safe to take in pregnancy. Please do not take other medication without checking with delivery suite, your midwife or doctor first. Call Delivery Suite on 0439869035 if you are unsure about any medication you may wish to take.

While you have the catheter in you can:

- Wear your underpants and clothes as normal, over the top of the catheter.
- Go to the toilet normally, to pass urine or open your bowels.
- Have a shower.
- Undertake normal daily activities such as walking.

While the catheter is in you should not:

- Place anything else inside the vagina (e.g. no tampons, no sex)
- Have a bath or go swimming

If you think:

- You may be going into labour
- You may have broken your waters
- You have a fever or are otherwise unwell
- You are not feeling the baby move as you normally do

***OR** if you have any other concerns*, then please ring the **Delivery Suite on 0439869035** (or your usual midwife if you are being looked after by a Midwifery Group Practice - MGP). The staff will help answer your question and if necessary, get you to come back into the hospital.