Approved by Quality & Patient Safety Committee
17/9/15

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

- A woman in whom induction of labour is indicated, where cervical catheter is considered an appropriate method of cervical preparation

3. STAFF

- Medical and midwifery staff

4. EQUIPMENT

- Vaginal examination tray
- Cervical catheters (as per manufacturer's instruction)
- Lubricating gel
- Aqueous chlorhexidine 0.02%
- Raytec swabs (5 pack)
- Adhesive tape
- Light source
- Cardiotocograph (CTG) machine

5. CLINICAL PRACTICE

- Perform midwifery and medical admission
- Check indication for induction and ensure no contraindications exist to induction with cervical catheter.
- Discuss induction of labour, explain procedure, obtain verbal consent and document
- Perform abdominal palpation and bedside ultrasound to confirm presentation
- Perform CTG prior to insertion of cervical catheter and ensure medical officer reviews if CTG is non-reassuring/abnormal
- Obtain verbal consent for vaginal examination
- Advise woman to pass urine and put on gown prior to catheter insertion
- Take woman (+/- her support person) to procedure room
- Ensure all equipment is available and that Raytec swabs are counted and documented
- Perform vaginal examination to confirm that cervical preparation is required
- Perform cervical catheter insertion with two staff members, one to assist and one to insert the catheter. Insertion should be performed by a doctor or midwife who has been trained in cervical catheter insertion
- Clean vulva and vagina with chlorhexidine
- Pass speculum to view the cervix
- Clean cervix with chlorhexidine
- Check catheter balloon is patent with sterile water or normal saline, prior to insertion
- Pass the catheter through the cervical os with curved (Magill) forceps
- Inflate the catheter balloon as per manufacturer's instructions
- Place a spigot on the end of the catheter
- Remove speculum

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- Tape the catheter to the leg with gentle tension to ensure the balloon remains at the internal os
- Complete the countable items checklist
- Walk the woman back to her room
- Perform a post-procedure CTG
- Ensure obstetric registrar/consultant reviews CTG if non-reassuring and appropriate action is taken
- Advise woman that some vaginal bleeding may occur and give sanitary pad
- Advise woman who is being induced with a relatively uncomplicated pregnancy, no exclusions to outpatient monitoring (see educational notes) and a reassuring post-procedure CTG, she has the option of going home overnight and to return to Delivery Suite the next morning for assessment. As with all inductions, ensure woman knows to call her midwife or Delivery Suite at 0600 hours to confirm bed availability and time of admission
- Give woman going home patient information leaflet "Induction of Labour : Information for Woman Going Home with a Cervical Catheter" – Appendix 1
- 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 becomes established
    - She has any concerns
- Assess women 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

- Integrated clinical notes
- Accountable Items Record Sticker

7. EDUCATIONAL NOTES

- Contraindications include :
    - Ruptured membranes
    - Significant antepartum haemorrhage
    - Malpresentation
    - Placenta praevia
- The cervical catheter works by physically dilating the cervix, disrupting collagen and causing localised inflammation, thereby increasing prostaglandin and/or oxytocin secretion
- 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. 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. 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
- There is no significant difference in vaginal delivery rates between women who undergo mechanical methods for cervical preparation versus those who undergo chemical methods. 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 the same or shorter than if using prostaglandin gel

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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. 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
- 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
    - Maternal age >40
    - Women being induced for logistical/social reasons
    - Women being induced postdates <42 weeks gestation

- Women NOT suitable for outpatient management include:
    - AFI <=5cm or AFI >=25cm
    - Fetal congenital anomaly
    - Gestational age <37 weeks or ≥ 42weeks
    - Multiple pregnancy
    - Macrosomia
    - Malpresentation
    - Pre-eclampsia
    - Previous rapid labour
    - Small for gestational age (estimated fetal weight or abdominal circumference <10th centile)
    - VBAC
    - Woman not wanting to go home
    - Lack of transport
    - Language or communication difficulties
    - 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
- Induction of Labour Policy and Procedure
- Cardiotocography (CTG) – Antenatal
- Accountable Items in the birthing environment (outside operating theatre)
- Vaginal examination in labour

9. RISK RATING

- Low

10. REFERENCES

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REVISION & APPROVAL HISTORY
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Approved Quality & Patient Safety Committee 15/4/11
Reviewed Obstetric Clinical Guidelines Group February 2011
Approved Quality Council 17/3/03

FOR REVIEW : SEPTEMBER 2020

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APPENDIX 1

Induction of Labour: Information for 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.
- 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 Panadeine Forte, you will have been given two Panadeine Forte tablets for pain relief. **You do not have to take the tablets if you do not want to.** They have been provided to you as many women do get cramps and discomfort with the catheter in, and are more comfortable and sleep better after taking the tablets. These are the same tablets as those offered to women who are staying in hospital to have their induction, or to women who come to hospital in early labour and go home again. They are safe to take in pregnancy at the doses provided. Please do not take other medication without checking with your midwife or doctor. Call Delivery Suite on 93826100 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 93826100** (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.