



Insertion of Cook® Cervical Ripening Balloon for Induction of Labour



CPD points: 3 hours

Developed by Veronica Ingram, West Gippsland Healthcare Group.

Acknowledgment to the members of the Gippsland Midwifery Educators Group and the Obstetric team at West Gippsland Healthcare Group.

Original developed 2018

SDLP OUTLINE

This package contains educational material related to the insertion of a Cook® Cervical Ripening Balloon in advance or as part of induction of labour (IOL).

RATIONALE FOR LEARNING PACKAGE

A Cook® Cervical Ripening Balloon is designed to gradually dilate the cervix by applying mechanical pressure to facilitate the IOL process. It is recommended for use at term when the cervix is not favorable for other methods of IOL. It works by applying steady pressure to the internal and external cervical os, aiding the dilation process.

Women who present to the maternity ward for insertion of a Cook® Cervical Ripening Balloon may be delayed if medical personnel are busy with other duties. This learning package aims to train midwives to insert Cook® Cervical Ripening Balloon so that midwives may play an active role in the care of women being induced, and so that the time from presentation to insertion may be reduced by having more practitioners available to commence the IOL. Reduction in time from presentation to commencement of IOL aims to improve patient flow and improve the woman's experience.

AIM

To train midwives in insertion of a Cook® Cervical Ripening Balloon for IOL.

OBJECTIVES

Demonstrate competency in insertion of Cook® Cervical Ripening Balloon including:

- Completion of the theory in this learning package.
- Completion of assessment activities as outlined in this learning package.
- Completion of competency assessment tool included in this learning package.

TARGET AUDIENCE & PRE REQUISITE TRAINING

This learning package is available to Registered Midwives who hold a current competency in speculum examination.

INSTRUCTIONS TO PARTICIPANTS

This learning package has three parts.

- Theoretical Component, including reading of associated local policies and procedures
- Assessment component consisting of short answer questions.
- A competency based skills assessment

Your completed learning package should be returned to your midwifery educator for evaluation. The competency assessment can be completed by a medical officer or midwifery educator and should be returned to your midwifery educator.

TIME FRAME

Participants are expected to complete the learning package within 6 months from receipt to ensure that they attempt the skills in a timely manner following completion of the theory.

ONGOING COMPETENCY

There is a need to practice regularly to improve and maintain this skill. Follow local guideline.

INSERTION OF A COOK® CERVICAL RIPENING BALLOON

Background

Insertion of a Cook® Cervical Ripening Balloon is considered to be extended scope of practice for a Registered Midwife. Cook® Cervical Ripening Balloon insertion is associated with lower rates of tachysytole than prostaglandins so is often used to ripen the cervix in the case of VBAC or where there are concerns about the babies ability to cope with labour.

Having this skill allows midwives to provide better continuity of care. It can also decrease the length of time between when a woman presents to the labour ward for IOL, and the time that the IOL commences due to having additional practitioners trained in this skill. The flow on effect from this is improved patient flow and an improved experience for the woman.

Guidelines

Cook® Cervical Ripening Balloon insertion is an invasive procedure which requires sensitivity and empathy for the woman. It is important to consider the woman's comfort, as well as their cultural, and personal background when performing this procedure.

Indication

- Documented indication for IOL
- MBS lower then 7
- Contraindication to prostaglandin or other chemical forms of IOL and/or;
- Maternal or clinician preference for balloon over prostaglandin IOL

Contraindications

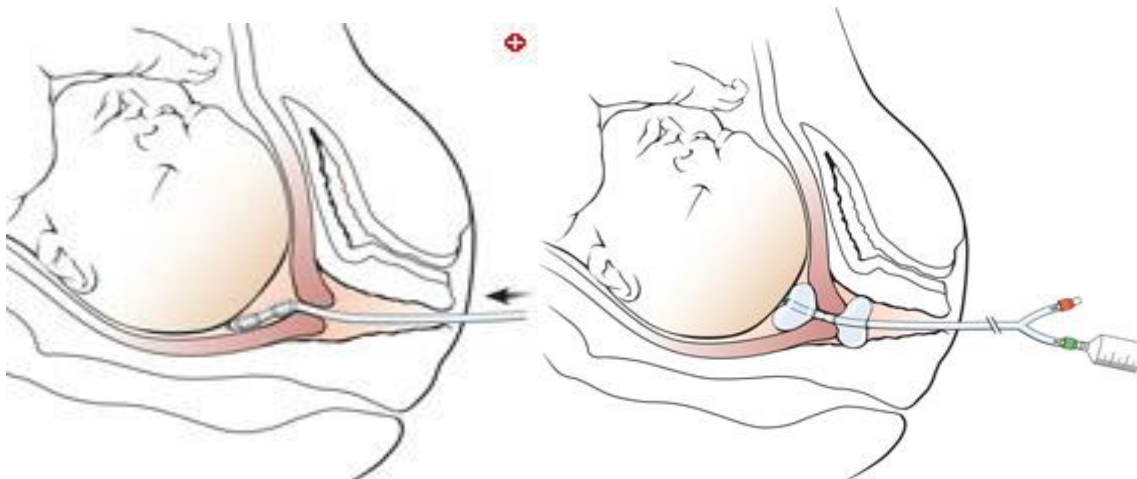
- Placenta previa/APH
- High or mobile head
- Any contraindication to IOL
- Maternal refusal
- Modified Bishops Score (MBS) over 7
- ROM

Equipment Required

- Bivalve speculum
- Cook® Cervical Ripening Balloon (latex - free) (double lumen)
- Sponge Forceps
- Bottle of Sterile Water solution
- Syringe – 50mls/20mLs
- Lubricating gel
- Tape
- Antiseptic solution
- Cardiotocograph machine

Technique

1. Obtain informed consent from the woman.
2. Ensure that privacy is maintained and that the woman has a support person if required.
3. Ensure the woman has an empty bladder and that a normal CTG trace has been achieved.
4. Perform abdominal palpation and document findings.
5. Set up for procedure.
6. Position the woman in lithotomy position.
7. Wash hands and don sterile gloves
8. Lubricate and insert speculum
9. Visualize cervix
10. Pre inflate both balloons to check for leaks. Deflate balloons completely following this check and discard if any leaks are evident.
11. Use sponge holder forceps, gauze and chlorhexidine solution to wash cervix.
12. Insert Cook® Cervical Ripening Balloon Catheter until both balloons have just passed the internal os. A stylet or pair of sponge holder forceps may be required to pass the catheter.
13. Inflate the uterine balloon (red valve) with 40mls mls of water.
14. Gently pull the device back until the balloon abuts the internal os.
15. Inflate the vaginal balloon (green valve) with 20mls of water.
16. Confirm that balloons are positioned on either side of the cervix, remove speculum and add further water to both balloons to a maximum of 80mls per balloon.
17. Tape the end of the catheter to the woman's leg. No traction is required. The woman is free to mobilize as desired.



Process:

Woman to be booked for IOL following local protocol.

Women to present and be admitted to birth suite at pre-arranged time.

Prepare the woman according to the general principles for performing procedures. Ensure informed consent is obtained prior to commencing the procedure, including consent for IOL and insertion of Cook® Cervical Ripening Balloon.

Commence CTG and take baseline observations (Temp, BP, HR, vaginal loss, uterine activity) prior to insertion of Cook® Cervical Ripening Balloon.

Perform VE and abdominal palpation once CTG normal

- If Modified Bishops Score (MBS) greater than 7 **and** fetal head engaged – woman is suitable for ARM – discuss findings of VE with the woman. Communicate findings to ANUM/MO and plan to rebook time of IOL if not appropriate to move straight to ARM.
- If MBS less than 7 **and** fetal head is engaged – woman is suitable for Cooks® Cervical Ripening Balloon insertion.

Insert Cook® Cervical Ripening Balloon following technique outlined on previous page.

Observations (Temp, HR, BP, uterine activity, FHR and vaginal loss) are re-assessed and recorded following insertion. **Note:** You will need to check your local hospital policy to determine if a normal CTG recording is required post insertion.

- If observations are within normal limits and the woman is comfortable and not experiencing contractions she can remain in the postnatal ward.
- Ask the woman to report
 - o Onset of contractions
 - o If the catheter falls out
 - o Vaginal bleeding
 - o Spontaneous rupture of membranes (SROM)
 - o Fever
 - o Abdominal pain
- If any observations are abnormal including FHR abnormalities escalate care according to local escalation protocol.

Document all findings and observations in the woman's notes including bishops score, the amount of water used to inflate each balloon and the time of insertion.

The Cook® Cervical Ripening Balloon is generally left insitu for >12 hours.

Remove Cook® Cervical Ripening Balloon by deflating both balloons.

Considerations

If the woman experiences moderate to severe discomfort after 30 minutes notify Medical Officer (MO) or Midwife in Charge (MIC). Offer use of oral analgesia in collaboration with MO/MIC. Offer reduction in balloon volume in 10ml increments – only as low as 50mls per balloon, any less than this will not have the desired effect. If the Cook® Cervical Ripening Balloon is expelled spontaneously continue with normal IOL management in collaboration with MO and MIC.

References

Cook Medical, (date unknown) Cervical Ripening Balloon, product information (accessed 25/06/2018) www.cookmedical.com

Hoppe KK, Schiff MA, Peterson SE, et al. 30mL single- versus 80mL double-balloon catheter for pre-induction cervical ripening: a randomized controlled trial [published online ahead of print August 25, 2015]. *J Matern Fetal Neonatal Med*. doi:10.3109/14767058.2015.1067297

Cromi A, Ghezzi F, Uccella S, et al. A randomized trial of preinduction cervical ripening: dinoprostone vaginal insert versus double-balloon catheter. *Am J Obstet Gynecol*. 2012;207(2):125.e1-e7. doi:10.1016/j.ajog.2012.05.020.

Further Reading/Viewing

Cook® Cervical Ripening Balloon with stylet procedure animation - English

https://www.cookmedical.com/products/wh_crbs_webds/

Please note that this video is for instructional purposes and local hospital guidelines should direct practice.

NAME _____

DATE _____

Cook Cervical Ripening Balloon Insertion Assessment Activities

1. List 3 reasons why it is beneficial for midwives to be able to insert a Cook® Cervical Ripening Balloon.

2. List 4 indications for IOL with Cook® Cervical Ripening Balloon.

3. List 6 contraindications to IOL with Cook® Cervical Ripening Balloon.

4. Case Study: A primiparous woman presents to the ward for IOL for macrosomia with Cook® Cervical Ripening Balloon. She has been seen in the pregnancy clinic and has been assessed as having a MBS of 3 yesterday. When you assess the woman prior to inserting the Cook® Cervical Ripening Balloon you find that the baby's head is mobile sitting just above the pelvic brim. Explain what steps you would take next.

5. Case study: A multigravida woman is booked for a Cook® Cervical Ripening Balloon insertion for static fundal height. Your abdominal palpation finds that baby is LOA with 1/5 of head above the pelvic brim. You perform a VE and find that her cervix is 2cm dilated and 1cm thick, her baby is at -2 station and the cervix is anterior and soft giving her a MBS of 8. Explain what steps you would take next.

6. Case Study: A primiparous woman presents to the ward for IOL for SGA. On vaginal examination you find that her cervix is 1cm open and 1cm thick, her baby is at -2 station and the cervix is posterior and firm giving her a MBS of 5. Explain what steps you would take next:

Date: _____ How long did this package take to complete? _____

	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
1. Overall, I found the learning package worthwhile					
2. The way in which the learning package was presented made it easy to understand					
3. My knowledge of this topic was improved after completing this learning package					
4. My skills in this area have been enhanced since completing this learning package					
5. The resources provided were sufficient for me to answer the review questions adequately					
6. I would recommend the learning package to others					
7. I will be able to apply knowledge and skills acquired in my clinical practice					

Comments (Optional)

Thank you for taking the time to complete this evaluation.
Your comments are valued and appreciated.
Please return this form to the Midwifery Educator

CLINICAL SKILLS

NAME: _____

DATE: _____

DEMONSTRATES: The ability to safely and accurately insert a Cook® Cervical Ripening Balloon	CRITERIA C = Competent S = Requires supervision D = Requires development		
PERFORMANCE CRITERIA	C	S	D
1. Obtains consent from the woman.			
2. Ensure that privacy is maintained and that the woman has a support person if required.			
3. Ensure the woman has an empty bladder and that a normal CTG trace has been achieved			
4. Set up for procedure, gathering all required equipment.			
5. Position the woman in lithotomy position.			
6. Wash hands and don sterile gloves			
7. Lubricate and insert speculum			
8. Visualize cervix			
9. Pre inflate and deflate both balloons. Discard if any leaks are evident.			
10. Use sponge holder forceps, gauze and chlorhexidine solution to wash cervix.			
11. Insert Cook® Cervical Ripening Balloon until both balloons have just passed the internal os. A stylet or pair of sponge holder forceps may be required to pass the catheter.			
12. Inflate the uterine balloon (red valve) with 40mls mls of water.			
13. Gently pull the device back until the balloon abuts the internal os.			
14. Inflate the vaginal balloon (green valve) with 20mls of water.			
15. Confirm that balloons are positioned on either side of the cervix, remove speculum and add further water to both balloons to a maximum of 80mls per balloon.			
16. Tape the end of the Cook® Cervical Ripening Balloon to the woman's leg. No traction is required.			

COMMENTS:

COMPETENT

YES

NOT YET – REQUIRES FURTHER SUPERVISION

NOT YET – REQUIRES FURTHER DEVELOPMENT I.E. RE READING THE PACKAGE

Midwife

Assessor