



Cervical ripening and induction of labour



Hôpital
Hotel Dieu
Hospital



Hôpital Général de
Kingston General
Hospital

This booklet has been adapted by Kingston General Hospital from the patient education pamphlet produced by The Ottawa Hospital Antepartum Task Team, a collaborative effort between the Antepartum Units, the High Risk Clinics, the Antepartum Home Care Program and the Champlain Maternal Newborn Regional Program (CMNRP).

Disclaimer

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Introduction

Your primary care provider has recommended that your labour needs to be induced or started rather than waiting for it to start by itself. Your primary care provider will have a discussion regarding the risks and benefits of the induction process.

This booklet will help you to understand induction of labour. It will also tell you about the different ways we can prepare your body for labour and what you can expect with each method.

After reading this booklet write down any questions or concerns you may have. Take them with you to your next prenatal visit or when you come to the hospital.

These are the definitions for some of the terms you will hear in your care provider's office or at the hospital.

Cervix: This is the narrow lower part of the uterus opening into the vagina.

Cervical ripening: This is the process of cervix softening and starting to efface (thin out). Cervical ripening usually happens during the last few weeks of pregnancy, when your cervix prepares for labour and your baby's birth.

Effacement: During pregnancy your cervix is about 3 – 4 cm. long. During labour and sometimes a few weeks before labour starts, the cervix will start to shorten. This shortening or thinning of the cervix is called effacement. The more effaced your cervix is, the more ready it is for labour. Your cervix will continue to efface during labour.

Dilatation: Occurs when your cervix opens from 0 to 10 cm. In some women the cervix can dilate 1 or 2 cm before labour begins.

What is induction of labour?

Induction of labour is when labour is started by an artificial method.

Why would I need an induction?

There are several reasons why your health care provider may want to induce your labour. The decision to induce your labour will be based on the health benefits for you and your baby. Your health care provider will discuss this earlier in the pregnancy so you can make an informed decision about an induction and what is best for you and your baby. Ask questions and voice any concerns you may have.

The most common reason for induction is going more than one week past your due date. This is called "post-dates." When your pregnancy goes past 42 weeks the placenta ages and may not work as well. This may result in difficulties for your baby and is the reason why most primary care providers will discuss inducing labour with you during the 41st week of your pregnancy.

It is important that your induction is not scheduled prior to 41 weeks unless medically indicated.

Your induction will be scheduled with the Labour and Delivery Unit.

A wait of 1 or 2 days is not unusual unless your condition is medically urgent.

Here is a list of some other reasons your labour may need to be induced:

- Blood pressure problems
- You are 37 or more weeks pregnant and your waters have broken (ruptured membranes), but labour has not started.
- Your baby's growth has slowed down
- You are diabetic
- You are in the 41st week of your pregnancy.

What are some reasons for not having an induction?

- Your due date is uncertain
- The baby is in the wrong position (breech or transverse). An external cephalic version may be offered during the 37th week of your pregnancy.
- The baby's cord is coming first.
- The placenta is too close to, or covering the opening of the cervix (low lying placenta or placenta previa).
- You have had a previous classical (up and down) incision on your uterus.
- You have active genital herpes lesions.

Why does my primary care provider need to examine my cervix before inducing my labour?

The condition of your cervix is the most important factor for success. Your cervix may need to be prepared prior to starting your induction. A ripe (or ready) cervix increases your chances of having a vaginal delivery. Your primary care provider will need to examine your cervix to know how ripe it is for labour.

Trying to induce labour when your cervix is not ready could result in a long, hard labour, an unsuccessful induction or the need for a cesarean section. If your cervix is unripe you will get Cervidil® and/or a Foley Catheter. This should help ripen your cervix and prepare it for labour.

Methods used to prepare your body (cervical ripening) for labour:

- **Membrane Sweeping:** Your care provider may suggest sweeping your membranes starting at the 38th week of your pregnancy following a discussion of risk and benefits. This may reduce the need for the use of a more formal method of inducing your labour. This is done in your care provider's office and doesn't require fetal monitoring.
 - **How is it done?** During a vaginal exam, a finger is inserted into the cervix to loosen the membranes around your cervix. This can sometimes stimulate labour after 38 weeks of pregnancy.
 - **What can I expect?** Many women report more discomfort during the procedure than they feel during a usual vaginal exam. You may have some bleeding or spotting after the procedure. There is a risk of your membranes breaking during this procedure; however there are no other risks to you or your baby.
- **Prostaglandin Use:** Prostaglandins are hormones which help to start labour by helping the cervix to ripen. The choice to use the medication Cervidil® will depend on how ripe your cervix is.
- **Cervidil® Ripening:** Cervidil® looks like a small flat tampon with a long string attached at one end for easy removal. The goal of this medication is to ripen your cervix, however, there is a risk that it will put you into labour without needing the next steps in the induction process.

What is the Cervidil® Process?

You will be provided with a date and time to go to Labour & Delivery for your Cervidil® procedure. Your care provider will determine if you will be able to go home once the Cervidil® is in or if you will need to be admitted and stay in hospital for the Cervidil®.

Outpatient Cervidil® Ripening Process

1. Arrive to the Labour and Delivery Unit at your scheduled time.
2. If your primary care provider is a Midwife, you will need to be transferred to the Obstetrics team for the Cervidil ripening process.
3. A Fetal Heart Rate Monitor is placed on your abdomen for 20 minutes minimum to check your baby's heart rate.
4. The physician performs a vaginal exam and places the Cervidil® in the back of your vagina, behind your cervix. This should take less than a minute to place it correctly. The Cervidil® will slowly start to release the medication (prostaglandins) when it's in place. It will ripen your cervix and prepare it for induction.
5. You will remain in bed for one hour after placement of the Cervidil® while you and your baby are monitored.
6. If you and your baby are doing well you will be asked to go for a walk in the hospital for 30 minutes.
7. You will return to Labour and Delivery and you and your baby will be monitored for another 20 minutes (minimum).
8. If the baby's heart rate is normal you will be given follow-up instructions and then go home.
9. The Cervidil® remains in for approximately 24 hours at which time you will return to Labour & Delivery. At this time your cervix will be checked to see if it's ready for induction of labour.

- **What can I expect?** You may have some backache, menstrual-like cramping, or pink vaginal discharge. Sometimes you can have contractions which are too close together. If this happens the Cervidil® may need to be removed.
- **What happens when I return to Labour & Delivery?** If your cervix is ripe and unit activity permits, you will be admitted and induction of labour will begin. If your cervix does not ripen after the Cervidil®, available options such as Foley catheter insertion will be discussed with you.

- **Inpatient Cervidil® Ripening Process:** Like outpatient Cervidil® ripening, your baby will be monitored for a minimum of 20 minutes prior to the insertion of Cervidil®. Once the Cervidil® is in place, you and your baby will be monitored for approximately 60 minutes. You will then be transferred to the maternity floor.

Foley Catheter Ripening

During this procedure a Foley catheter is placed through your cervix with the balloon, at the end of the Foley catheter, above your cervix. The balloon at the tip of the catheter is filled with sterile water. The weight of the balloon on your cervix will help your cervix open. This method uses no medication and will not put you into labour. As with Cervidil®, you may be able to go home with the Foley Catheter or you may be admitted and stay in the hospital with the Foley catheter. Your primary care provider will determine which option is appropriate and will discuss this with you.

- **How is it done?** During a vaginal examination, a speculum is used to look at your cervix. A Foley catheter is inserted through your cervix and the balloon at the end of the Foley catheter is filled with sterile water. This will stretch your cervix. The stretching of your cervix should help your body (cervix) prepare for labour. The Foley catheter can be left in place for approximately 24 hours or until it falls out because your cervix has started to dilate.
- **Outpatient Foley Catheter Process:** A similar process is followed as for Outpatient Cervidil. Please see “Outpatient Cervidil Ripening Process”.
- **Inpatient Foley Catheter:** A similar process is followed as for Inpatient Cervidil. Your baby’s heart rate will be monitored for 20 minutes prior to the procedure. After the Foley catheter is in place, your baby’s heart rate will be monitored as per your care provider’s orders. Please see “Inpatient Cervidil Ripening Process” for further information.
- **What can I expect?** Having the Foley catheter put through your cervix and the physical weight of the balloon on your cervix can be uncomfortable, but the risk of your contractions being too long or too frequent is minimal. There are no risks to baby. Many women experience some cramping and bloody mucous after the Foley has been in place.

- The Foley catheter can be used after contractions have settled and 30 minutes after the Cervidil® has been removed.

Induction of Labour

Once your cervix is ripe you will be admitted to Labour & Delivery for induction of labour.

- **Amniotomy (ARM: Artificial Rupture of Membranes)** Your health care provider breaks your water by making a small hole in the membrane holding the amniotic fluid. This is called an ARM. This can only be done when the cervix has already started to thin and open.
 - **How is it done?** A vaginal exam is completed to make sure your baby is in a good position. Your care provider will then break the membranes with a plastic hook. You may feel some discomfort during the exam and procedure but it will not hurt your baby. You will feel a warm gush of fluid coming from your vagina. The colour of the amniotic fluid is noted as well as your baby's heart rate.
 - **What can I expect?** Having a ARM may make your contractions start or get stronger. Your physician will discuss a timeline for starting oxytocin if your labour does not progress after an ARM. It is normal to continue to leak fluid from your vagina until your baby is born. There is a very small risk that the umbilical cord does come out first it is an emergency for your baby, and will mean that a cesarean birth will need to be done immediately. There is a slightly higher risk of infection for you and your baby after an ARM.
- **Intravenous Oxytocin** Oxytocin is similar to the hormone your body produces. Oxytocin is one of many factors which cause labour to start and progress. If you have a Midwife as your care provider, a transfer of care to the Obstetrical team will be necessary at this point.
 - **How is it used?** An intravenous drip or infusion (IV) is started in your hand or arm. The oxytocin infusion will be put on a special pump and connected to your IV line. The pump controls the amount of oxytocin you are given. The oxytocin is started at a low rate and is gradually increased until you are in active labour. Your blood pressure and pulse will be checked regularly as well

as feeling (palpate) your uterus to check for contractions. Your baby's heart rate and your contractions will be monitored using a continuous external fetal monitor until your baby is born.

- **What can I expect?** The contractions may be stronger and more frequent than they would be in spontaneous labour (labour which starts on its own).

If the contractions are too close together or if there is concern with the baby's heart rate, the amount of oxytocin may need to be reduced or stopped. You might need medication to relax your uterus and decrease the frequency of or stop the contractions. There are numerous pain relief options that are available to you. These include the use of non-pharmacological interventions such as shower, massage and counter pressure. Once oxytocin is initiated, use of the tub is prohibited. Pharmacological interventions include nitrous oxide, opioid analgesics and epidural analgesia.

- **What happens if Cervidil Ripening and/or Induction of Labour doesn't work?** It is important to remember that while most inductions of labour go well for both you and your baby, not all will result in a vaginal birth, and a cesarean birth may be needed. If this is the case, your care provider will discuss this with you. Your health care providers are here to support you and the safe birth of your baby.

What will happen when I'm admitted to the Labour and Delivery Unit?

The following will be completed:

- You will be asked some questions about your health, this pregnancy, previous pregnancies and your birth plans.
- Your blood pressure, pulse, temperature, and respirations will be taken and your baby's heart rate will be listened to.
- Your abdomen will be felt (palpated) to see if you are having any contractions.
- A blood sample will be taken to check your hemoglobin and blood type.
- You may have an intravenous catheter (i.e. IV) initiated.

Telephone numbers

- Labour and Delivery, Kingston General Hospital:
Telephone: (613) 549-6666, Ext. 2315
- Health Care Provider Telephone: _____
- Ambulance: 911

Notes

Contact:

Labour and Delivery, KGH site
Kingston Health Sciences Centre
76 Stuart Street
Kingston, ON K7L 2V7
Phone (613) 549-6666 ext. 2315
Website www.kgh.on.ca

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