

# Induction of labour

Induction of labour is recommended if it is thought that the baby will be better off outside the womb than inside. Labour may also be induced if you yourself are experiencing (serious) complaints.

The most common reasons for induction are:

- There is a medical condition affecting either yourself or your baby that necessitates birth.
- Your baby is overdue (pregnancy of more than 41-42 weeks).
- Your membranes are ruptured and labour has not started.
- Your blood pressure is high.

There are many more reasons for recommending induction of labour. These reasons may be related to the course of a previous pregnancy or to other accompanying problems during the current pregnancy. Induction of labour means that labour is started artificially. For that reason, they work closely together with the supervising gynaecologist.

## Preparation for induction of labour

*When are you expected at labour ward?*

The doctor or midwife will discuss various details with you beforehand, such as the date and time on which you should phone labour ward. This will depend on the reason for the induction and the method to be used.

There are two options:

1. You call the labour ward **(020) 444 4822** at **06:00** in the morning, on the agreed date, to find out whether there is an available delivery room. You are normally expected at the labour ward (ward 8C) between **06:30 and 07:00**, unless alternative arrangements have been made with you. We may have to ask you to contact the labour ward again, later on, if no delivery room is available.
2. You call the labour ward **(020) 444 4822** at **18:00** in the evening, on the agreed date, to find out whether a delivery room is available. You are normally expected at the labour ward (ward 8C) at **19:00**, unless alternative arrangements have been made with you. We may have to ask you to contact the labour ward again, later on, if no delivery room is available.

*What should you bring?*

You should bring the same things as you would in the case of a 'standard' delivery: comfortable clothing to wear during labour and following delivery, slippers, toiletries, a car seat and baby clothes. You might also like to bring something to help you relax and to pass the time (books, papers, tablet etc). During ripening or in the beginning of labour, contractions are often very infrequent. In that case, you may welcome some distraction.

## *Directions to the VUmc*

Information regarding parking, public transport and accessibility can be found at [www.vumc.nl](http://www.vumc.nl)

## *At the labour ward*

When you arrive at the labour ward you will be welcomed by a nurse. The nurse will carry out a CTG (cardiotocography) examination. A CTG is a registration of the baby's heartbeat. It also shows uterine contractions. Two elastic straps will be placed around your bump to be able to register the baby's heartbeat and uterine contractions. An internal examination will be carried out by the doctor or midwife, to determine which method can best be used to induce labour.

## *What happens if the cervix is unripe?*

For induction of labour to be successful it is important that the cervix is 'ripe'. An unripe cervix is still long and feels firm. A ripe cervix is shorter, feels softer and is slightly open (dilation). If this is not (or not yet) the case, the cervix has to ripen first. This may take a few hours to several days. In medical terms, this is referred to as 'priming'.

There are three methods for ripening the cervix:

- cervical ripening by means of a balloon catheter. Your midwife or doctor will discuss this with you, and indicate which method is best suited to your circumstances.
- cervical ripening by means of a capsule that you swallow (oral misoprostol).
- cervical ripening by means of a capsule that is inserted into the vagina (vaginal misoprostol).

## *Cervical ripening by means of a balloon catheter*

A balloon catheter, inserted via the vagina, can be used to ripen the cervix. This is a catheter (thin tube) that has a balloon attached to one end. The balloon is inserted into the cervix during an internal examination (vaginal examination), or with the aid of a speculum (duckbill). Once the balloon has been inserted, it is filled with water. The cervix will dilate due to the pressure on the cervix and natural hormones (prostaglandins) that lead to cervical ripening will be released.

The process of inserting a balloon catheter is usually not painful, but may sometimes feel uncomfortable. It is possible that some blood will be discharged afterwards. The catheter will be taped against your leg. You can walk around as usual and don't have to stay in bed. Balloon catheters are usually inserted for 12-48 hours. The ripening process may proceed without you noticing, or it may be accompanied by contractions. Genuine labour contractions do not usually occur at this stage. The balloon catheter will usually fall out by itself at some point. If not, the doctor or midwife at the labor ward will feel around the balloon to see if it has already come loose, or whether it is still firmly in position. Ripening usually takes 12-48 hours, but it can sometimes take much longer. When the cervix is ripe, induction of labour can continue.

## *Cervical ripening by means of misoprostol (Cytotec®)*

To ripen the cervix, misoprostol capsules can be administered orally (by mouth) or vaginally. These capsules contain prostaglandins. Prostaglandins are hormones that encourage cervical ripening, they are also involved in starting labour. Your doctor or midwife will discuss this with you, and indicate which method is best suited to your circumstances.

In most instances, the doctor will get you to take misoprostol capsules **orally**. Prior to taking the capsules, an internal examination (vaginal examination) will take place. Every

four hours, your doctor or midwife will assess the situation, to see whether you need to take more capsules. Most often capsules will have to be administered several times to achieve sufficient ripening (at most three times a day). It won't be necessary to repeat the internal examination every four hours if you don't have any contractions yet. A CTG will be carried out for at least half an hour after taking the capsules, to monitor the baby's heartbeat and uterine contractions. Once this has been done, you can walk around again if you wish.

The doctor or midwife may decide to administer the capsules **vaginally**. This will take place during an internal examination (vaginal examination). You must lie down for an hour after the capsule has been inserted, to make sure it does not fall out. During this time, a CTG will be carried out to monitor the baby's heartbeat and contractions. If you wish, you can walk around again after that. A further internal examination will take place every four hours to assess whether the cervix is sufficiently ripe. Most often several capsules have to be administered (no more than four per day) to achieve sufficient ripening.

### **Waiting for labour to start**

In some cases, once the balloon catheter has been inserted you can return home to await the final stages of induction. More information about returning home after a balloon catheter has been inserted can be found at the back of this leaflet. It is not possible to go home if misoprostol is used to ripen the cervix.

If the method of induction and/or the reason for induction does not allow you to spend this time at home, you will be admitted to the obstetrics ward (ward 8B). Be aware that your partner will not be able to stay here overnight. As soon as labour starts, or active induction can continue, you will return to the labour ward. Your partner is welcome at labour ward at any time of the day or night.

### **The induction process**

When the cervix is sufficiently ripe and there are a few centimeters dilation, induction of labour can continue. The doctor or midwife will break your waters during an internal examination. This should not be more painful than the internal exam itself. In some cases, this will cause contractions to start spontaneously, but it will generally be necessary to administer a drug (oxytocin) that stimulates contractions, through a drip. Depending on the contractions and the baby's condition, the dosage will be adjusted carefully using an infusion pump. During induction, the baby's condition and the contractions are generally continuously monitored by means of a CTG.

Sometimes, once the waters have broken, a thin wire is attached to the baby's head (fetal scalp electrode) enabling more direct monitoring of the baby's heartbeat. This will not cause your baby any distress. However, the cervix must be sufficiently dilated before a scalp electrode can be placed. It is, therefore, possible that the scalp electrode will be attached at a later stage and that the baby's heartbeat will be monitored externally (on your bump) until then. In a few cases, it may be necessary to measure contractions internally. In that case, a thin tube will be inserted into the uterus. The straps around your bump will then no longer be necessary.

Even if continuous CTG monitoring is being used, you won't have to spend the whole time lying down. You may wish to stand next to the bed or sit on a chair, provided the situation allows. Your freedom of movement will, of course, be rather limited because you will be attached to the CTG machine.

Once induction has started, the course of labour should be the same as for a 'standard' labour. This means that the contractions will gradually become stronger and more painful. You will generally be free to deal with the contractions in your own way. If the contractions during dilation are too painful to bear, you can request pain relief. Please read the VUmc's leaflet entitled Pain relief during labour for full details about the various forms of pain relief that are available.

If no further check-ups are required for you or your baby, you can go home two to three hours after delivery. However, it may be necessary to monitor you and your baby for a while, depending on the indication for induction and on how labour progressed. In that case, you will be admitted to the maternity ward.

#### *A subsequent birth*

It is certainly not the case that labour will need to be induced every time you give birth in the future. It all depends on why you had to be induced on this particular occasion.

#### **Questions**

If, after reading this leaflet, you have any questions, please ask the nurse, midwife or doctor who looks after you during induction. You can also contact the obstetrics outpatient clinic, telephone (020) 444 0034, or the labour ward, telephone (020) 444 4822.

#### **Going home with a balloon catheter**

In some cases it is possible to spend the initial period waiting at home. In that case, the balloon catheter will be inserted at the labour ward, after which you may return home.

#### *What can I expect to happen at home?*

The balloon catheter will usually fall out by itself at some point, while you are urinating or walking around, for example. This usually takes 12-48 hours, but it can sometimes take much longer. You may wait at home during this stage, the catheter should not normally bother you much. You can walk around and shower as usual. We advise against having a bath, rinsing internally or having intercourse, due to the increased risk of infection. It would be wise to spend the day (or days) at home and make sure you get plenty of rest with a view to the forthcoming labour.

#### *The arrangements*

Insertion of the balloon catheter will take place at labour ward. You may return home after the balloon catheter has been inserted. You will return to labour ward the next day. The position of the balloon and the ripeness of the cervix will then be assessed by means of an internal examination. If the cervix is sufficiently ripe, the membranes can be ruptured and induction can continue. If the cervix is not sufficiently ripe, you will return home and the situation will be reassessed the next day. Balloon catheters generally stay in place for 12-48 hours. If after this time the cervix is still not sufficiently ripe, other methods suitable to your situation will be considered.

#### *What can happen?*

It is possible that you will experience some period-like abdominal pain and/or backache and that you will have more frequent Braxton Hicks contractions. There may also be a discharge of mucus or blood (vaginally or via the catheter), this is also quite normal. If the balloon catheter falls out, you can just dispose it.

#### *When should I call?*

- You can call **day and night** if you are concerned or if you have any questions

- If your balloon catheter has fallen out
- If your waters have broken
- If you have bright-red blood loss
- If you are in a lot of pain
- If you think labour has started
- If your baby is moving less frequently than usual
- If you have a fever of over 38.0°C

*What phone number should I call?*

You can call the labour ward on **(020) 444 4822**