

## Induction of Labour What is it and what does it involve?

### What is induction of labour?

In most pregnancies labour starts Spontaneously between 37 and 42 weeks, leading to the birth of your baby. Induction of labour is a process designed to start labour artificially.

### When is induction recommended?

When it is felt that your or your baby's health is likely to benefit, you may be offered induction. On average about one in three labours are induced.

If you are healthy and have had a trouble-free pregnancy, induction of labour will normally be arranged for 12 days after your expected date of delivery (EDD).

### Why should I be induced?

#### If your pregnancy is more than 41 weeks

Even if you have had a trouble-free pregnancy, we will offer you an induction of labour 12 days after your EDD, because after 42 weeks the risk of stillbirth increases. Induction of labour for this reason does not increase the chances of you requiring a Caesarean section compared with waiting for labour to start naturally. The ultrasound scan performed earlier in your pregnancy helps us to determine your baby's due date more accurately. This reduces your chances of unnecessary induction due to incorrect dates.

If you choose not to be induced at this stage, then from 42 weeks you will be offered:

- Twice weekly checks of your baby's heartbeat using a piece of equipment called an electronic fetal heart rate monitor
- An ultrasound test to check the depth of amniotic fluid (or 'waters') surrounding your baby.

- These tests will help us to monitor the health of your baby but do not prevent stillbirth.

### If your waters break before labour starts

About 1 in 20 women experience pre-labour rupture of membranes. In other words, their waters break before their labour contractions (pains) have started. Pre-labour rupture of membranes can cause a small increase in the risk of the baby developing an infection after birth. 6 out of 10 women will go into labour naturally in the 24 hours following membrane rupture. Once it has been confirmed that your waters have broken, you will be given the choice of early induction of labour or waiting (expectant management) for up to 24 hours.

### Induction for pre-labour rupture of membranes

Early induction reduces the risk of infection to you or your baby. You will be induced with either a vaginal pessary (prostaglandin) or a drip (oxytocin) dependent on whether your cervix is open or not. You will need to stay in hospital once the induction has commenced. Some women find induced labour more painful and you may need stronger pain relief, such as an epidural. Women who elect for induction are no more or less likely to give birth by caesarean section or with the help of an instrument (forceps or vacuum).

### Expectant management

As 6 out of 10 women will go into labour within 24 hours of their waters breaking, you can choose to go home and await for labour to start naturally.

Due to the small increase risk of infection to you and your baby we advise that you:

- Check your temperature 4 hourly during waking hours to ensure it is below 37.2°C;
- Check for other signs of infection, such as shivers or flushing;
- Check for changes in the colour or odour of your amniotic fluid (waters). It should normally be clear-straw coloured and has a distinctive straw smell (unlike urine).

Bathing and showering are not normally associated with an increase in risk of infection but sexual intercourse may be.

We would recommend that you return for induction at 24 hours if you haven't started to labour naturally.

If you are worried that you have a temperature or the waters are a different colour, the baby's movements are less than normal for you, or any other concerns, please contact the Triage Unit and speak to a midwife (tel: **01392 406616**).

## Other reasons for induction of labour

Your doctor may advise induction of labour due to other reasons which may include medical complications of pregnancy or concerns about your baby's wellbeing.

## Ways we induce labour

### 1. Membrane sweeping

This has been shown to increase the chances of labour starting naturally within the next 48 hours and can reduce the need for other methods of induction of labour. It is our policy to offer this to all women (unless their waters have broken) prior to formal induction.

Membrane sweeping involves your midwife or doctor placing a finger just inside your cervix (neck of the womb) and making a circular, sweeping movement to separate the membranes from the cervix. It can be carried out at home, at an antenatal clinic appointment or in hospital, and should be performed before attempting other methods of induction of labour.

You may find the internal examination uncomfortable and you may experience some bleeding similar to a 'show' following the procedure. This is because the internal examination involves stretching your cervix. This is very normal and will not cause any harm to your baby nor will it increase the chance of you or your baby getting an infection.

## What does induction involve?

You will need to come to the Maternity Unit the morning that the induction is booked. When you arrive, your blood pressure, temperature and pulse will be checked. You will also have a scan to check if the baby's head is down in the pelvis. The baby's heartbeat will be monitored electronically for about 30 minutes. The midwife will examine you internally and assess the dilatation of the cervix.

## 2. Using prostaglandins

The vast majority of women will require their cervix to be 'ripened' prior to the labour being started. This is done by inserting a pessary called 'Proress' into the vagina. The pessary contains hormones called prostaglandins which are released at a steady rate. This should start to soften and open the cervix over the following 24 hours. However, the pessary can remain in situ for up to 30 hours.

The pessary looks like a small tampon and has a long tape attached to it, which enables the midwife to remove the pessary when necessary. The tape may be tucked into the vagina, you should be careful not to pull on it, e.g. when you go to the toilet.

You will then be transferred to the Antenatal/ Postnatal Ward. You will remain here until you are ready to go to Delivery Suite either because you are in labour or to continue the induction process.

After a minimum of 24 hours, if you have not gone into labour, you will be taken into a delivery room and your waters will be broken. You may need to be given a drip containing Oxytocin (see below) if your contractions have not started.

The continuation of the induction process on labour ward is dependent on a midwife being available to provide care for you. At times, high workload in the unit can delay this transfer to the Delivery Suite. The staff on the ward will keep you informed of any delays. Please ensure that you have things to occupy your time whilst waiting.

If, after approximately 24 hours, your cervix is not open and the staff are unable to break your waters then the doctor will discuss further treatment with you at this stage. Up to 70% of women will go into labour during the 24 hours after the pessary is inserted. In this case, the pessary will be removed, or may even fall out and you will be transferred to labour ward or the birth centre if appropriate, once a room is available.

### **Possible side effects of using prostaglandins**

Some women have very minor side effects. You may have some nausea or diarrhoea. Thousands of women have been studied using this method of induction and it has been found to be safe for both mothers and their babies. Some women experience frequent contractions, and the pessary has to be removed early and a drug may be required to slow the contractions down. In rare cases this may not be effective and the baby may need to be delivered by caesarean section.

## **3. Mechanical method to induce labour**

If you have had a previous Caesarean, more than four children, or you have had propress (see above) and this has been unsuccessful then you will be offered a mechanical method to Induce labour. We are also offering home induction with mechanical methods (Balloon catheter or Dilapan) to certain groups of women. The advantage of mechanical methods is that they enable the cervix to dilate so that we can then break your waters without using the prostaglandin hormones contained in the Propress pessary which may cause issues for some women. Also, additional monitoring is not normally required while these methods are being used, meaning you can go home.

### **3a. Balloon catheter**

This involves passing a catheter with a small balloon into the cervix. Water is then used to inflate the balloon and the catheter is taped to your leg. It may be slightly uncomfortable but will not be painful. The catheter may fall out within 24 hours and you will be taken to labour ward once a room is available for your waters to be broken. Following this you may need the oxytocin drip (see above). This method cannot be used if your membranes have already ruptured.

Although both prostaglandins (including Propress) and a mechanical catheter induction are not licensed in women with a history of a previous caesarean section, they have been used in UK practice for years.

### **3b. Dilapan**

Dilapan-S is a non-hormonal method of inducing labour and is safe for you and your baby even if you have other medical conditions such as diabetes or asthma, have previously had a caesarean section or are planning a home induction.

Dilapan-S® is a slim rod made of a synthetic firm gel. Routinely, 3 up to 5 rods are gently inserted together into the cervix and gradually absorb the fluid from the surrounding tissue.

Each thin rod will slowly expand over 12 hours and open your cervix by causing it to dilate and soften to help prepare you for labour. They will remain from 12 -15 hours (preferably overnight) up to a maximum of 24 hours.

There is a reduced risk of strong uterine contractions while your cervix is dilating, which makes this initial part of the induction process more comfortable and safer. One of the added benefits of this method is that you can be managed as an outpatient while the rods are in so long as we don't have concerns about you or your baby..

Do's	Dont's
<ul style="list-style-type: none"> <li>✓ You can go to the toilet and perform your daily activities as normal, such as remaining mobile.</li> <li>✓ Showering is acceptable</li> </ul>	<ul style="list-style-type: none"> <li>✗ You cannot have a bath or use a vaginal douche.</li> <li>✗ It is NOT safe to have sexual intercourse while the rods are in position.</li> <li>✗ Do not try to remove the rods yourself.</li> </ul>

The procedure can be a bit uncomfortable, but generally it is well tolerated by most women, lasting 5-15 minutes. A speculum may also be used to help with placement of the rods and sometimes a special forceps also. A small amount of bleeding can occur during or after placement of the rods due to the delicacy of the surrounding tissue, but this is not uncommon and should not be a concern.

You may then be able to go home (if you've had an uncomplicated pregnancy) and will be given a specific time to return for removal of the rods. You will then stay with us to continue your induction of labour. Unlike propress, only 1 in 10 women with labour spontaneously with dilapan cervical dilation and hence there is a higher chance of you needing your waters broken plus and oxytocin drip.

#### 4) Breaking your waters and using oxytocin

If your cervix is open, or once it has been ripened by the pessary we can induce labour by breaking the waters around the baby and starting a hormone drip (oxytocin) to bring on the contractions. Breaking your waters involves the midwife or doctor performing a vaginal examination; they will use a small instrument to make a hole in the bag of waters around your baby. This will cause no harm to your baby, but the vaginal examination needed to perform this procedure may cause you some discomfort.

Oxytocin is given in hospital on the labour ward and is a drug that encourages contractions. Oxytocin is given through a drip and enters the bloodstream through a tiny tube into a vein in the arm. Once contractions have begun, the rate of the drip can be adjusted so that your contractions occur regularly until your baby is born. Whilst being given the oxytocin the midwife will monitor your baby's heartbeat continuously.

#### Possible side effects of using oxytocin

Women who have oxytocin are more likely to want an epidural to help with pain. Because oxytocin is given by a drip, being attached to this will limit your ability to move around. Whilst it may be okay to stand up or sit down, it will not be possible to have a bath or move from room to room.

Very occasionally oxytocin can cause the uterus to contract too much which may affect the pattern of your baby's heartbeat. If this happens you may be asked to lie on your left-hand side and the drip will be turned down or off to lessen the contractions.

#### Home Induction

We are now able to offer home induction with mechanical methods. This will allow you to spend time at home whilst your cervix is being gently dilated by either a balloon catheter or Dilapan. Not all women are suitable for home induction. If you are unsure whether you fit the criteria, please discuss with your midwife. Indications include:

- Obstetric cholestasis
- Raised maternal age with a normally grown baby
- Low Papp A with normally grown baby
- Gestational diabetes (GDM) on diet or metformin
- Maternal choice for concern regarding large for gestational age (LGA) baby
- IVF conception
- Post dates

It is important that you live within 30 minutes from the hospital, have someone with you at all times and have transport to enable you to return if there is a concern. Please call triage if you have any concerns or if any of the following develop.

## **When to call the Maternity Triage 01392 406616**

- Excessive or persistent bleeding
- Significant Pain
- Rupture of membranes (leaking fluid)
- If the balloon catheter or Dilapan-S® rods fall out – please keep them with you
- Reduced fetal movements
- Any other concerns

## **Possible delays**

The workload on the labour ward can change rapidly and in the interests of safety we may need to delay your induction or your transfer to the labour ward, either for a few hours or, occasionally, until another day. Most inductions can be safely delayed, although we appreciate that the delay may be a difficult time for you. We will continue to monitor the health of you and your baby during any delay that might occur.

The Trust cannot accept any responsibility for the accuracy of the information given if the leaflet is not used by RD&E staff undertaking procedures at the RD&E hospitals.

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