Maternity Department

Induction of Labour (IOL)

What is induction of labour?

Labour is a natural process that usually starts on its own between 37-42 weeks of pregnancy. Sometimes labour needs to be started artificially; this is called 'induction of labour' (IOL).

IOL is a serious intervention and should therefore only be undertaken when the indication is clear and there will be a measurable health benefit for either mother or the baby.

Why might I be offered induction of labour?

Most women have a normal pregnancy and birth, but sometimes it can be best to induce labour:

- To avoid your pregnancy lasting longer than 42 weeks gestation (prolonged pregnancy) or
- If your waters break and labour does not start naturally

The most common reason for induction is to avoid a prolonged pregnancy. Your midwife or obstetrician will offer to discuss induction of labour at your 38 week antenatal appointment. The discussion should include;

- The risks and benefits of being induced
- Membrane sweeping
- Why you are being offered induction of labour
- When, where and how the induction will be carried out
- The arrangements for support and analgesia available
- Alternative options if you choose not to be induced
- What happens if induction of labour is unsuccessful

When is induction for prolonged pregnancy offered?

It is known that there is an increase risk of sudden stillbirth in prolonged pregnancies over 42 weeks gestation. At Dorset County Hospital we offer induction of labour at 40 weeks plus 12 days of pregnancy.

The most accurate method of working out the date your baby will be due, is by measuring your baby at the 12 weeks dating / combined screening scan, and using this information to calculate your due date. This is the date we will use when we offer you an induction date.

Should I be offered an early induction of labour if I am 40+ years old?

The Royal College of Obstetricians and Gynaecologists (RCOG) published a paper in February 2013 called ‘Induction of Labour at Term in Older Mothers.

The average age of childbirth is rising markedly in Western countries. In the UK the number of women aged 40 and older having a baby has risen from 27,000 in 1985-86 to 82,000 in 2006-8, this shows a threefold increase.

The incidence of stillbirth at 40 weeks of pregnancy is low; however evidence shows that the incidence is higher for women aged 40 or over. At 41 weeks of gestation the risk of stillbirth is 0.75 in 1000 in women under the age of 35 years old, increasing to 2.5 in 1000 women aged 40 years and over (RCOG 2013). The reasons behind this increased risk of stillbirths with advanced maternal age are still unknown.

In the opinion of the RCOG the available evidence suggests that offering induction of labour to women aged 40 or over at 39-40 weeks gestation would reduce late antenatal stillbirths and maternal risks of an ongoing problem such as pre-eclampsia. The evidence is stronger if you have any medical problems, if this is your first pregnancy or you are of Afro Caribbean ethnicity as these are all known to have higher stillbirth rates.

There is increasing evidence available which suggests that inducing you at 39-40 weeks of pregnancy will not increase your risk of having and operative (forceps or Ventouse) delivery or emergency caesarean section.

The paper referred to in this section is available online at the Royal College of Obstetrician and Gynaecologists website for more information.

Please speak to your midwife or ask to see an obstetrician to discuss any issues you have, to ensure that you have an individual plan of care for your labour and birth which reflects your wishes.

What happens if I do not wish to be induced for prolonged pregnancy?

Your wish will be respected. We will normally refer you to an obstetrician to discuss the induction process and explore the reasons you do not wish to be induced.

From 42 weeks of pregnancy we will arrange for you to have twice weekly electronic fetal monitoring (CTG) to record your baby’s heart rate, and an ultrasound scan to look at the amount of water around your baby. The results of these investigations will be reviewed by an obstetrician, and any abnormality found will be discussed with you at length, and recommendations made based on the findings.

However there is no evidence that a normal result from these investigations will ensure safety of your baby as unfortunately sudden antenatal stillbirth can occur despite normal test results.

What should I be offered before induction of labour takes place?

Before you are offered induction of labour you should be offered a membrane sweep to help you go into labour naturally.

We offer membrane sweeping at your 40 and 41 week antenatal appointments during your first pregnancy, or your 41 week appointment if you have had a baby before. If labour does not start after this, you can ask for additional membrane sweeps.

Membrane sweeping involves your midwife/doctor performing an internal examination (vaginal examination), and placing a finger just inside your cervix (neck of the womb) and making a circular movement, separating the membranes from the cervix. The procedure can be uncomfortable and may cause some bleeding, but it will not harm your baby or cause your baby to get an infection.

How is labour induced?

During induction, you will be given drugs that act like natural hormones that kick start labour. These drugs are called prostaglandins.

There are various methods used to induce labour:

Prostin E2® vaginal tablet (dinoprostone)
This is a prostaglandin known to help induce labour by encouraging your cervix (neck of the womb) to soften and shorten (ripen). This process allows your cervix to open. The Prostin® tablet is inserted into your vagina just behind your cervix, and works on the neck of the womb. It can sometime take two or three tablets to ripen your cervix to enable the next part of the induction process to take place. Prostin® tablets are inserted at approximately 6 hourly intervals to a maximum of 3 tablets (the third tablet is only given after you have been reviewed by an obstetrician); your baby will be monitored before and after each tablet to make sure that the heart rate remains within normal limits.

Artificial rupture of membranes
This is carried out by a midwife or obstetric doctor. Once your cervix is open enough to insert an amnihook (looks like a crochet hook) through it then the bag of waters around the baby can be broken using the hook end of the amnihook. Once the waters have broken then an intravenous infusion (drip) will be started called oxytocin.

Oxytocin infusion
This is a synthetic drug that acts on the uterine muscle causing it to contract and is used once your membranes have been ruptured. It is given through an infusion ‘drip’; the rate is gradually increased to mimic normal labour. To make progress in labour you need to be having 4 contractions every 10 minutes, so the infusion is increased until this rate is obtained. Your baby’s heart rate needs to be constantly monitored whilst the infusion is in progress via an electronic monitor (CTG machine) to make sure that your baby’s heart rate remains within normal limits.

Do you use the same induction method for a first baby as you would if I had had a baby before?

We use the same method to induce first time pregnancies as we do for women who have had a baby before.

If you have had a previous caesarean section or you have had more than four babies then an individual plan of care for your induction should be made by an obstetrician, recommending the number of Prostin® tablets to be used to induce labour.

What happens when I come into hospital for induction of labour?

You will be admitted to the antenatal ward and will be looked after by a midwife. She will check that you know what the induction procedure involves. Please ask her any questions or queries you have, we know that women are generally more relaxed if they understand what is going to happen.

We will palpate your womb (have a feel of your tummy) to find out which way your baby is lying. If the midwife is uncertain if your baby is head or bottom down you will be scanned on the ward to check the presentation. Your baby's heart rate will be monitored with a cardiotocograph machine (CTG), to ensure that it is normal, this usually take about 20-40 minutes depending on your baby.

An internal examination will be carried out by a midwife once she is happy with the trace of your baby's heart rate. During the internal examination the midwife is assessing how long, soft and open your cervix (neck of your womb) is and how low down your baby's head is. Depending on the findings you will either be given a Prostin® tablet or your waters will be broken and the oxytocin infusion will be commenced. You will be kept fully informed of the findings of the examination and the recommended plan of care.

If your are given a Prostin® tablet then your baby's heart rate will be monitored for about 20-40 minutes to ensure it is normal. Once the monitoring has finished you can get up and walk around, eat and drink as normal. If you start experiencing regular contractions after the Prostin® pessary has been given please let a member of staff know. You will be assessed again after 6 hours (a vaginal examination) to see whether your waters can be broken or whether a second Prostin® tablet is required.

Please be aware that occasionally the ward situation may mean that your induction may be delayed or a midwife may not be available to assess you after six hours, if this is the case we will inform you as soon as possible and endeavour to ensure that you are examined by a midwife as soon as it is safe to do so.

If a third Prostin® tablet is required you will be seen by an obstetric doctor, they may perform the internal examination and discuss your plan of care with you.

What happens if I have had 3 Prostin tablets and my waters cannot be broken?

It is important that you understand that the process of induction of labour is not without risk, and once the process has started that there is a commitment to continue until your baby is safely delivered. Please be aware that occasionally the induction process for whatever reason is not successful. When this happens you will be seen by an obstetric doctor to discuss a plan of care

We know that a vaginal birth is the safest and best outcome for both mother and baby in the majority of cases, but in circumstances where the induction process fails, the doctors may recommend that you consider a caesarean section as the safest method of delivery.

If your cervix (neck of the womb) is almost soft and beginning to open then the doctors may recommend a period of rest before the induction process starts again.

Please ask as many questions as you need to enable you and your birthing partner to make the right decision for you and your baby.

What happens if I have had a previous caesarean section and I am being induced this time?

Induction of labour can increase the risk of your caesarean section scar weakening so rather than having 2 or 3 Prostin® tablets as detailed above to help soften your cervix (neck of the womb), we generally only use 1 Prostin® tablet.

You will be admitted to the Maternity Unit and looked after by a midwife who will check that you do not have any questions or queries about the induction process.

We will monitor you baby's heart rate using an electric monitor (CTG), to ensure that your baby is not showing any signs of being distressed. Once we are happy that your baby's heart rate is within normal limits the midwife will perform a vaginal examination. If she is unable to break your waters she will insert a Prostin® tablet into your vagina, and then monitor your baby's heart rate again using a CTG machine, to check that it stays within normal limits. You will then be able to get up and walk around as normal.

As long as the ward is not too busy you will be reassessed 6 hours after your first Prostin® tablet. Your baby's heart rate will be monitored to ensure that it remains within normal limits. The midwife will perform a vaginal examination to see if she is able to break your waters, if this is successful you will have a drip of a synthetic hormone called oxytocin started (see section on 'how is labour induced' for details).

If the midwife is unable to break your waters then she will ask an obstetric doctor to come and see you to discuss a plan of care. The doctor may ask to perform another vaginal examination to see if they can break your waters. The doctor will discuss a plan of care with you. One of your choices may be to wait and have another vaginal examination the following day to see if your cervix has become softer to enable your waters to be broken (this can sometimes happen without having another Prostin® tablet).

If your waters cannot be broken and a decision is made for you to have a caesarean section this will not normally be performed until the next day as it is classified as an elective caesarean section and these are generally performed between 08.30 – 17.00hrs. If there are any concerns about either you or your baby then the caesarean section will be classified as an emergency, which means it will be performed as soon as is safely possible.

What happens if my waters break after 37 weeks of pregnancy?

From evidence we know that the majority of women whose membranes rupture after 37 weeks of pregnancy go into labour spontaneously within 24 hours.

We will ask you to come into the hospital so that we can make sure your membranes have ruptured and that the loss is not due to anything else such as normal pregnancy discharge. We will check that both you and your baby are well and that there are no signs of an infection or that your baby is distressed.

If everything is normal with you and your baby and your membranes have rupture then we will give you the choice of going home or staying in the maternity unit, to await spontaneous labour. If we are concerned about you or your baby we will discuss everything with you and advise that you stay in hospital until your baby is born.

If you do not go into labour within 24 hours then we would recommend your labour being induced as research has shown that the risk of the baby getting an infection increases after 24 hours and therefore to reduce this risk we recommend induction of labour.

If you choose to be induced after 24 hours an internal examination will be performed to assess the neck of your womb (cervix). If your cervix is tightly closed then you will be given a Prostin® tablet and your baby's heart rate will be monitored. Approximately 6 hours after the Prostin® has been given your labour will be induced using an intravenous (drip) drug called oxytocin which will help establish regular contractions.

If the neck of your womb (cervix) is already starting to open up when you are examined then your labour will be induced using an intravenous (drip) drug called oxytocin which will help establish regular contractions.

If you do not wish to be induced after 24 hours, then an individual plan of care will be made for you to include regular monitoring of your temperature and your baby's wellbeing.

What about pain relief?

Prostin® tablets can sometimes cause you to have some back ache or period like dragging pains, you may wish to relax in the bath for a while, or try the TEN's machine.

Please see the leaflet 'Methods of Pain Relief in Labour' for all the options available.

You will be offered support and all the pain relief options available to you depending on your stage of labour in the same way as if you're labour had started spontaneously.

When the oxytocin infusion is used it is very important that we can monitor your baby's wellbeing at all times to ensure that it does not become distressed. We are unable to monitor your baby in this way if you are in the birthing pool. We therefore do not advise you to use the birthing pool as a form of pain relief.

What are the risks of induction of labour?

The main risk is that the process might fail to get you into labour and you may need to have a caesarean section to deliver your baby. This is more common if you are being induced before your due date as your body may not be as receptive to the drugs being used to start labour.

Sometimes the Prostin® tablet can cause your womb to be over stimulated, causing you to have very frequent contractions, which can be distressing for both you and your baby. We have a drug that can be used in this situation which helps your womb to stop contracting and to relax.

Further Information

Maternity Unit telephone number: 01305 254267

National Institute for Health and Clinical Excellence (NICE) Induction of labour guidelines available online at www.nice.org.uk

Royal College of Obstetricians and Gynaecologist (RCOG) Induction of Labour at term in Older Mothers, available online at www.rcog.org.uk

About this leaflet:

Author:	Jane Hall Antenatal, Intrapartum and Screening Matron
Written:	August 2018
Approved:	August 2018
Review date:	August 2021
Edition:	v1.1

If you have feedback regarding the accuracy of the information contained in this leaflet, or if you would like a list of references used to develop this leaflet, please email pals@dchft.nhs.uk

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