AIMS For a better birth...

Induction of Labour

This page is intended to explain in outline the situations where induction of labour might be offered, what it might involve and what options you have. There is a lot more detail on all these topics in our bookAIMS Guide to Induction of Labour[1](principal author Nadia Higson.)

What is induction of labour?

There is increasing evidence that babies send chemical signals when they are ready to be born, and in particular when their lungs are ready to start breathing[2]. This causes the mother's body to produce chemicals called prostaglandins that start the physiological process of labour.

Inducing labour means taking action to bring forward the start of labour rather than waiting for this physiological process to begin. It is often understood to mean medical methods, but self-help methods or complementary therapies when used to start labour are also a form of induction. All these methods are trying to stimulate or mimic the physiological process of labour and this can have consequences.

Why might I be offered an induction?

According to NHS Maternity Statistics[3] the proportion of labours in England that are induced has increased from 21% in the year to March 2010 to 34% in the year to March 2021.

There are many different situations in which induction is offered. The point in pregnancy at which it is suggested will depend on the reason for suggesting it. It might be because there is a cause for concern about the wellbeing of you and/or your baby. Depending how far advanced your pregnancy is, your decision on the timing of an induction may need to be a trade-off between the risk to your baby of being born too soon, and the risk of continuing your pregnancy.

More often induction is offered because of a concern that problems might develop or some risks to you or your baby (including stillbirth) might increase if the pregnancy were to continue beyond a certain number of weeks. The quality of the evidence about whether there really is an increased risk in these situations, and if so whether induction would reduce it, varies a lot. In some cases there is good evidence that induction can reduce the chance of harm to you and/or your baby, but often the evidence is limited, of poor quality and even contradictory, and sometimes it is virtually non-existent. It's also usually the case that the actual risks remain low, whether or not labour is induced.

Due to the limitations of the evidence, it's often a case of considering which view you feel more comfortable with: "Induction might help, so why not do it just in case?" or "There's no evidence that induction does any good, so why do it?"

Below is a brief discussion of some of the common reasons for induction to be offered, but there are many others, and a full discussion of the evidence about induction in various situations is beyond the scope of this article. For more details of situations in which you might be offered induction, a review of the evidence for each and a list of things that you may want to consider, see the AIMS Guide to Induction of Labour[1], or contact the AIMS Helpline for information and support.

Your waters broke before your labour started: The NICE guideline[4] recommends offering a choice of induction either after 24 hours or straightaway if your waters break after 37 weeks of pregnancy (though it's up to you if you want to wait longer than this). This is to avoid an increased risk of infection for you or your baby. Most labours will start naturally within 24 hours of the waters breaking. The evidence review 'Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)'[5] suggests that induction may reduce your chance of developing an infection yourself, but there may be no difference in the chances that your baby will. None of the evidence is of high quality, and any additional risk appears to be small.

If your waters break earlier in pregnancy there is evidence[6] that it may be better to wait for your labour to start at least until 37 weeks if there is no other cause for concern, to avoid the risks to your baby of being born prematurely.

Your pregnancy has lasted 41 weeks: The NICE guideline[4] recommends that you should be told that "some risks associated with a pregnancy continuing beyond 41+0 weeks may increase over time" and induction from 41 weeks "may reduce these risks", but that you "will also need to consider the impact of induction on [your] birth experience when making [your] decision". The risks they list are: a higher chance of a caesarean birth; your baby being admitted to a neonatal unit; and stillbirth or neonatal death. However, they say that the evidence that induction reduces these risks is not "definitive" and "the absolute risk remains low" whether or not labour is induced after 41 weeks. In fact, the evidence from different types of study is contradictory.[7] One recent review[8] suggests that about 500 inductions of pregnancies that have lasted 41 weeks would be needed in order to avoid one baby dying.

There are guidelines that recommend offering induction or a planned caesarean earlier than 41 weeks if you have any of the following risk factors. Please see the relevant guideline or the AIMS Guide to Induction of Labour[1] for details.

- You have **Type 1, Type 2 or Gestational Diabetes Mellitus**[9] especially if your baby is also predicted to have a high birth weight
- You have **high blood pressure** that can't be controlled with drugs, or develop **pre-eclampsia**[10]
- You develop severe **Intrahepatic Cholestasis of Pregnancy**[11]
- You are expecting **twins or triplets**[12]

You might also be offered induction before 41 weeks for various other reasons (such as your age or the fact that you conceived through IVF), but you should be aware that there is no good evidence to support this.

Your baby is expected to have a high birth weight but you don't have diabetes: The NICE guideline[4] says that in this situation "there is uncertainty about the benefits and risks of induction of labour compared to expectant management"[13]. For this reason they have not made a recommendation about offering induction earlier than 41 weeks.

Your baby seems to be growing slowly but is otherwise well: A package of measures designed to address the national stillbirth rate (the Saving Babies' Lives Care Bundle[14]) recommends induction between 37 and 38 weeks for the smallest 3% of babies (below the 3rd centile), and at 39 weeks for babies between the 3rd and 10th centiles. However, the majority of these small babies are born in good health and being born early also carries some risks. At present, we do not have enough evidence to show whether it is always better to induce labour when a baby seems small, or to wait and monitor the baby's growth and well being.

Can I decline an induction?

It is your right to decide whether to accept the offer of induction and no-one should try to pressure or bully you into it. The new NICE guideline on inducing labour[4] makes it very clear that your midwife or doctor should "recognise that women can decide to proceed with, delay, decline or stop an induction. Respect the woman's decision, even if healthcare professionals disagree with it, and do not allow personal views to influence the care they are given". For more about your rights to make decisions, and your care team's duty to give you information to help you decide, see our webpage Making decisions about your care[15] and our book AIMS Guide to Your Rights in Pregnancy & Birth[16] (principal author Emma Ashworth.)

Can I request an induction?

Although you have the right to decline an induction, you do not have the right to insist on one, but your doctor should at least be prepared to consider your request. The NICE guideline[4] says, "Consider requests for induction of labour only after discussing the benefits and risks with the woman, taking into account the woman's circumstances and preferences". If you feel strongly that this is the right thing for you, or are worried about you or your baby's well being if they are not born soon, and feel that you are

not being heard, you have the right to ask for a second opinion from another doctor.

When should I not be offered induction?

The NICE guideline[4] says that induction "is not generally recommended" for babies in the **breech position (**bottom down) but could be considered if your baby needs to be born soon and you don't want a caesarean. It also says that labour should not be induced if a baby has **very poor growth and is also showing signs of distress,** but a planned caesarean should be offered. You should not be offered induction just because of a **previous very fast labour**.

What is involved in an induction?

Non-medical methods of induction

Unfortunately, very little research has been done on the effectiveness or safety of these methods and most of the studies that have been done were small.

There is some limited evidence that nipple stimulation, acupuncture or acupressure, and eating dates in the last few weeks of pregnancy can help to bring on labour. There is a lack of clinical evidence about whether other self-help methods (such as eating curry or pineapple, or having sex) or using complementary therapies (such as hypnotherapy, homeopathy, reflexology or aromatherapy) work. However, people do report finding them helpful, and trying them may make you feel more in control and able to relax. This could in itself make it more likely that your labour will begin without the need for medical induction.

Raspberry leaf (as tea or tablets) is often suggested but there is no evidence that this helps to start labour, and it may have potential adverse side-effects[17] or interact with other medications such as insulin[18], so check with your midwife before taking it.

Methods of medical induction

This section gives a basic outline of the methods that you may be offered, but for details of the evidence on the effectiveness, benefits and risks of these please see the AIMS Guide to Induction of Labour[1].

The methods that you are offered will depend on how far your body has progressed in its preparation for labour (your Bishop's score). To assess your Bishop's score a midwife or doctor would need to perform a vaginal examination to feel how much your cervix has softened, thinned and started to dilate. A high Bishop's score makes it more likely that an induction will be successful, so before making decisions about induction you might want to ask what your Bishop's score is.

A membrane sweep involves a midwife or doctor carrying out an internal vaginal examination, and at the same time passing a finger inside your cervix and moving it around to loosen the membrane. The NICE guideline4 recommends you should be offered a sweep at an antenatal appointment after 39 weeks if you want it.

Evidence[19] suggests that a sweep makes it about 20% more likely that you will go into labour without further interventions, but you are no more likely to avoid a caesarean or assisted birth. A sweep may be more painful than a regular vaginal examination and can cause bleeding.

If you have decided to proceed with an induction and your Bishop's score is still six or less, the NICE guideline[4] recommends that you should be offered the choice of either artificial**prostaglandins** or a **mechanical method** to encourage your cervix to ripen further.

There is evidence that prostaglandins are effective at bringing on labour, but they can cause severe pain and nausea, and sometimes very strong, frequent contractions (hyperstimulation), which can be stressful for the baby.

The evidence about mechanical methods is more limited but they do not seem to carry the same risk of hyperstimulation and one type (called a balloon catheter) has been shown to be effective.

With both methods it could take 24 hours (sometimes much more) before you are in active labour.

Once your Bishop's score is above six, the NICE guideline[4] recommends having your waters broken artificially (called amniotomy or ARM[20]) and then being given a synthetic version of the hormone oxytocin through a drip to encourage strong labour contractions, either at the same time or a bit later.

There is no direct evidence for the effectiveness of either of these methods if labour has begun but is progressing slowly following induction with prostaglandins or a mechanical method. There is some evidence that synthetic oxytocin helps to shorten a labour that started naturally so it may have a similar effect in an induced labour. Both methods have potential risks which include more pain and increased stress on you and your baby.

How might having an induction affect my choices for the birth?

Agreeing to an induction could affect your other choices and your experience of birth.

- You would be asked to agree to repeated vaginal examinations to assess your Bishop's score and check progress.
- Your choice of birthplace is likely to be limited to a hospital labour ward as procedures like breaking your waters or giving a hormone drip would not be done at home or in a birth centre.
- It may mean spending several days in hospital before getting into active labour.
- You may not be able to have a partner or supporter present throughout the early stages of

induction

- You may have limited options for pain relief especially in the early stages, and may find it harder to get agreement to use a birth pool.
- An induced labour may be more painful, especially if you have your waters broken or use a hormone drip.
- Continuous monitoring is likely to be recommended for an initial period after the insertion of prostaglandins or a mechanical induction device. It may also be offered if you have your waters broken and is usually recommended if you use a hormone drip.
- If the induction fails to work you may need to consider having an unplanned caesarean.

What can help me make decisions about induction?

The NICE guideline[4] recommends that you should have a chance to discuss your options for the birth early in your pregnancy and again later on. You may find it helpful to have this conversation early so that you can start thinking about your preferences, especially if you know you are likely to need to consider an induction. Alternatively, you may prefer to focus on positive preparation for labour and not think about induction unless a reason arises. This could happen late in your pregnancy, and mean that you do not have very long to think about it.

Depending on your circumstances and how things develop, there are various decisions you might want to make including:

- Whether you want to bring forward the time of your baby's birth or wait for labour to start naturally.
- If you decide to bring your baby's birth forward, whether to have an induction or a planned caesarean and at which week of pregnancy to do this.
- If you decide to have an induction, which methods you want to use to try to start your labour, including whether to have one or more membrane sweeps in late pregnancy, and whether you prefer prostaglandins or a mechanical method.
- If you would like to go home in the early stages of induction if all is well.
- If the ripening[21] methods fail, whether to try again (e.g. have another dose of prostaglandin), try ARM and an oxytocin drip, wait a while, or request a caesarean instead.
- What methods of pain relief you'd like to use (See our webpage Ways of managing your labour[22])

You may find it helpful to look at our webpage Making decisions about your care[15] and the section in the AIMS Guide to Induction of Labour[1] called 'Discussing induction with doctors and midwives'. This includes a list of questions that you might want to ask your carers. There are also sections on what may help an induction to work and things to consider if you are planning an induction.

References

[1] Higson N. (2020) AIMS Guide to Induction of Labour.shop.aims.org.uk/products/aims-guide-to-induction-of-labour

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[3] NHS Maternity Statistics, England - 2020-21 - NHS Digital, November 2021digital.nhs.uk/data-and-information/publications/statistical/nhs-maternity-statistics/2020-21

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[6] RCOG 2019 "Care of Women Presenting with Suspected Preterm Prelabour Rupture of Membranes from 24+0 Weeks of Gestation (Green‐top Guideline No. 73)obgyn .onlinelibrary.wiley.com/doi/10.1111/1471-0528.15803

[7] Chippington Derrick D. & Higson N 'Labour Induction at Term – How great is the risk of refusing it?' AIMS Journal, 2019, 31:1 www.aims.org.uk/journal/item/induction-at-term

[8] Middleton P et al Cochrane review 'Induction of labour at or beyond 37 weeks' gestation' July 2020 www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD004945.pub5/full

[9] NICE guideline 'Diabetes in pregnancy', December 2020www.nice.org.uk/guidance/ng3

[10] NICE guideline 'Hypertension in pregnancy', June 2019www.nice.org.uk/guidance/ng133

[11] ICP support 'Guideline for managing ICP', August 2019www.icpsupport.org/protocol.shtml

[12] NICE guideline 'Twin and triplet pregnancy, September 2019www.nice.org.uk/guidance/ng137

[13] Editor's note: The term 'expectant management' means waiting to see or waiting for labour to start.

[14] Saving Babies' Lives Care Bundle: www.england.nhs.uk/mat-transformation/saving-babies

[15]Making decisions about your care. AIMS 2020. www.aims.org.uk/information/item/making-decisions

[16] Ashworth E. (2020) AIMS Guide to Your Rights in Pregnancy & Birth. shop.aims.org.uk/products/aims-guide-to-your-rights-in-pregnancy-birth

[17] Raspberry leaf tea during pregnancy www.babycenter.com/pregnancy/diet-and-fitness/red-raspberry-leaf-tea_40007946

[18] Raspberry Leaf and Hypoglycemia in Gestational Diabetes Mellitus

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[19] Finucane E.M. et al Cochrane review 'Membrane sweeping for induction of labour', February 2020 www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD000451.pub3/full

[20] Editor's note: ARM stands for Artificial Rupture of the Membranes. AIMS has a useful glossary of terms here: www.aims.org.uk/general/glossary

[21] Editor's note: Ripening refers to the measures taken to soften the cervix in preparation for the further stages of the induction process. Ripening happens naturally in the days before the spontaneous onset of labour.

[22] Ways of Managing Your Labour. AIMS 2018 www.aims.org.uk/information/item/managing-labour