Plain language summary

Induction of Labour

Who is this summary for?

This summary is for women planned for induction of labour (IOL), their support partners or their families.

What is this summary about?

The National Women and Infants Health Programme (NWIHP) recently updated the National Clinical Practice Guideline (CPG) on Induction of Labour (IOL). This CPG is for healthcare professionals who care for women/parents in pregnancy and covers all aspects of care for women who have an induction of labour. This care includes the indications, methods and possible complications of induction of labour. The purpose of this plain language summary (PLS), using non-medical terminology, is to provide an overview of the national CPG.

This summary explains what is meant by 'induction of labour', the reasons that women may be offered an induction of labour, the methods used to induce labour and the possible complications of induction of labour.

What is Induction of Labour?

Induction of labour is a way in which labour is started artificially. There are different ways of inducing labour by using drugs to soften and open the cervix (neck of the womb) and to encourage the uterus (womb) to start contracting (tightening) regularly. The woman's choices regarding her care and her birth plan should be central to any decisions made during the IOL process. The woman can choose not to have an induction of labour, and her individual circumstances can be discussed with her healthcare provider.

- Induction is an intervention that may affect birth options and birth experience
- It may impact on the place of birth and can prolong hospital stay
- It may increase the need for pain relief, as induced labour may be more painful than spontaneous labour
- It increases the number of vaginal examinations, as this is required to assess the cervix and monitor progress
- It results in an increased level of fetal monitoring
- It is offered by healthcare professionals when birth of the baby confers a benefit to the woman and/or her baby, that outweighs the benefits of continuing the pregnancy

https://www.hse.ie/eng/about/who/acute-hospitals-division/woman-infants/clinical-guidelines/

https://www.rcpi.ie/Faculties-Institutes/Institute-of-Obstetricians-and-Gynaecologists/National-Clinical-Guidelines-in-Obstetrics-and-Gynaecology

Can a birth partner attend an induction of labour?

It is encouraged for a birth partner to be present with the woman to offer support and where applicable to be involved in any decision-making processes.

Why might a woman be offered an Induction of Labour?

- Prolonged Pregnancy (from 41 weeks + 0 days of pregnancy)
- When the water around the baby breaks but labour doesn't start
- Maternal age more than or equal to 40 years
- On scan the baby is measuring larger than its gestational age
- Elective Induction (at / around 39 weeks of pregnancy)
- Maternal Request
- Other reasons such as high blood pressure in pregnancy, diabetes in pregnancy or if a baby is measuring smaller than gestational age are not covered in this Guideline as they are discussed in detail in separate guidelines.

Prolonged pregnancy

This is when the pregnancy is overdue, or past the due date. Women with uncomplicated pregnancies can safely wait for labour to start by itself up to 41weeks+0days. Research studies show that inducing labour at 41+0 weeks reduces the risk of stillbirth and the chance of some other adverse outcomes for the baby.

When the waters break but labour doesn't start

If the bag of water around the baby breaks and the woman is over 37 weeks pregnant, it is safe to wait up to 24 hours to see if the labour contractions will start on their own. An immediate induction of labour may be offered if there is concern about pregnant woman or the baby's wellbeing, if there is meconium in the waters, if the pregnant woman has GBS or if the woman requests an immediate induction.

Maternal age 40years or over

Women who are aged 40 and over may be offered an induction at 39 – 40 weeks pregnant. This is because some risks of prolonged pregnancy are higher in women who are older.

The baby is measuring larger than gestational age

If the baby is measuring larger than expected an induction has been shown to reduce complications in labour such as shoulder dystocia (baby's shoulders getting stuck behind the pelvic bone) and fractures to the baby's clavicle bone (collar bone). There does not seem to be an increase in the risk of Caesarean section, but an induction may cause an increase in anal sphincter injuries (damage to the muscle surrounding the back passage). It is also important to note that ultrasound estimation of the baby's weight may not be accurate in late pregnancy close to the woman's due date.

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Elective Induction

Inducing labour at 39 weeks in normal risk pregnancies without a medical reason may reduce the risk of Caesarean section, stillbirth and some other bad outcomes for the baby. The woman should discuss these benefits and risks with her healthcare provider.

Maternal Request

Choices in childbirth and shared decision making are central to planning the timing and mode of birth that is best suited in each individual circumstance. Each pregnancy is unique, and women can discuss timing of birth, induction of labour and mode of birth with their healthcare provider.

What methods are used to induce labour?

Membrane Sweep

Pharmacological Methods of Induction of Labour

- Propess Pessary
- Prostin Gel
- Misoprostol Tablet
- Oxytocin Infusion

Mechanical Methods of Induction of Labour

- Balloon Catheter
- Dilapan
- Artificial Rupture of Membranes

Membrane Sweep

This is a vaginal examination offered from 39 weeks of pregnancy, to feel how soft or dilated the cervix may be. If a finger can be passed through the neck of the womb, a doctor or midwife can stretch the cervix and sweep the membranes (bag of waters surrounding the baby). This can increase the chance of going into labour spontaneously, and may reduce the need for an induction, especially in women who have had a baby before. A sweep can cause discomfort, pain and vaginal spotting at the time and/or immediately after the examination.

Pharmacological Methods

Prostaglandin is a hormone made in the body and can be given as a medication, in the form of a vaginal pessary (Propess), gel (Prostin) or tablet (Misoprostol) to soften the cervix. There is no difference in effectiveness between the Propess pessary, Prostin gel or Misoprostol tablet. Prostaglandin options are effective at inducing labour but can be associated with contractions that are too frequent (hyperstimulation) and changes in the baby's heartbeat.

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Propess Pessary

This is a small pessary that is placed high in the vagina, beside the cervix. This stays in place for up to 24 hours and slowly releases a medication called prostaglandin which softens the cervix.

Prostin Gel

This is a gel that contains the medication prostaglandin. It is inserted into the vagina with an applicator. The dose of gel can be repeated every 6 hours if needed.

Misoprostol Tablet

This is a tablet that is taken orally (by mouth). This can be repeated every 2 hours if needed.

Oxytocin Infusion

Oxytocin is a natural hormone made in the body and it stimulates the womb to contract. Oxytocin can be given through a drip in the arm once the waters have broken to encourage regular labour contractions. Once the drip is started, it usually continues until the birth of the baby.

Mechanical Methods

Mechanical methods of induction, such as Dilapan or the balloon catheter are as effective as prostaglandin medication at inducing labour. There is no difference in Caesarean section rates. They may have the additional benefit where they are reversible, and the risk of the womb over-contracting and subsequent changes to the baby's heart rate are reduced. They are typically favoured for women who have had a previous Caesarean section, as they reduce the risk of serious complications, such as rupture of the caesarean scar.

Balloon Catheter

A small balloon is passed into the cervix and is inflated with water. This puts mechanical pressure and stretch onto the cervix, helping it to soften and dilate. This is left in place for between 12 – 24 hours

Dilapan

Dilapan dilators are inserted into the cervix to absorb fluid and help to soften the cervix. They also stimulate natural prostaglandin hormone release, which further softens the cervix. These are left in place for between 12 – 24 hours.

Artificial Rupture of Membranes (ARM)

This is also called "breaking the waters." If the neck of the womb (cervix) is soft and dilated enough, it may be possible to do a vaginal examination and break the waters. This may bring on regular contractions on its own, or else a hormone drip of oxytocin may be used next.

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Where will an Induction be Performed?

In most maternity units in Ireland, the induction process is conducted as an inpatient. Before the induction is started, the midwife will confirm that the baby is lying in the head-down position and will listen to the baby's heartbeat with a monitor for 20-30 minutes. The woman's wellbeing such as her blood pressure and heart rate are also checked. In some units, an "outpatient induction", meaning the woman can be at home during some of the induction process, may be available for normal-risk, uncomplicated pregnancies. During this time, a midwife will be in contact with the woman to check up and see if any contractions have started or if the waters have broken, and the woman will have guidance on when to come back to the hospital.

What pain relief will the woman be offered?

In the early stages of labour, paracetamol, warm baths, TENS machine, massage and mobilisation can help with pain relief. An injection called pethidine is also available. This is a strong painkiller that may allow women to sleep during contractions, but it can also make some women feel nauseous or lightheaded. For this reason, anti-sickness medications can be given at the same time.

If a woman finds the vaginal examinations in labour to be very uncomfortable, gas and air may be offered to help. If the contractions are getting very strong and frequent, the midwife may offer to examine the woman to see if she is in active labour. If the woman wishes to have an epidural anaesthetic, this is done on the labour ward by an anaesthetic doctor.

What are the potential complications of induction of labour?

- Unsuccessful Induction
- Uterine Hyperstimulation
- Cord Prolapse
- Uterine Rupture

Unsuccessful induction

If the induction process has been unsuccessful in starting labour, decisions regarding further management options will be made on an individual basis with a consultant obstetrician, and after discussion with the woman and her partner.

Some potential options in this situation include:

- Considering a rest period prior to attempting further induction of labour (if safe to do so)
- Birth by Caesarean section

Uterine hyperstimulation

This is when the contractions are too frequent and has the potential to cause distress to the baby. It occurs in 7 out of 100 cases. The woman may be advised to have medication to slow down the number of contractions. If there are serious concerns about the baby's heartbeat that do not resolve, an emergency Caesarean section may be needed.

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Cord prolapse

This is when the waters have broken, and the baby's umbilical cord falls down below the baby's head. It is an emergency, as the blood flow through the cord to the baby may be compromised and cause distress. If the cord is felt on vaginal examination, the baby may need to be born urgently, which would usually be by Caesarean section.

Uterine rupture

This is when a scar on the womb begins to tear and open. It is a rare event that occurs once in 8,000–15,000 births. It is more likely to happen in women who have had a previous Caesarean birth, or who may have a scar on their womb from other previous surgeries. The risk of rupture with one previous Caesarean section is 0.5%, and an induction of labour increases the risk by three times. For this reason, women with a previous Caesarean section are recommended to have continuous monitoring of their baby's heartbeat throughout labour, in order to detect possible early signs of uterine rupture.

Summary

Induction of labour is a significant decision that can impact both the mother and the baby. It's essential for women to be well-informed, understand the reasons behind the induction, and be aware of the potential risks and benefits. Open and ongoing communication with healthcare providers ensures that every woman's circumstances are considered, and the best possible care is provided. Remember, every pregnancy is unique, and the ultimate goal is the well-being of both the mother and the baby.

For further information visit:

https://www2.hse.ie/pregnancy-birth/labour/

https://www.hse.ie/eng/about/who/acute-hospitals-division/woman-infants/clinical-guidelines/

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