

Inducing labour

The purpose of this leaflet is to introduce to the patient the concept of inducing labour and why and how this is done.

In most cases, labour starts between weeks 37 and 42 of pregnancy. This type of childbirth is known as spontaneous delivery. When medicinal products or equipment are used to trigger labour before the start of spontaneous delivery, the term induced labour is used.

If it is no longer safe to continue the pregnancy and wait for the start of spontaneous delivery for various reasons related to the mother or the foetus, it is necessary to induce labour.

The purpose of inducing labour is to start a vaginal delivery by simulating uterine contractions.

The patient must be hospitalised for the procedure to monitor the health status of the mother and the foetus as closely as possible.

Methods of inducing labour

The method used for inducing labour depends on cervical ripening, which is assessed based on the Bishop score (cervical position, dilation, consistency, effacement, position of the front of the foetus in the pelvis). The medical history of the patient must also be considered, e.g. previous c-sections or surgery on the uterus.

The following methods are used to induce labour:

- Oral misoprostol – a synthetic analogue of the natural hormone prostaglandin with a similar function to prostaglandin to help prepare the body for childbirth. The medicinal product will cause the cervix to soften up and start to dilate.
- Balloon catheter – a thin tube is inserted into the cervix with a small balloon on the end. This balloon is then inflated with liquid to apply mechanical pressure to the cervix. This method will cause the cervix to soften and dilate. The balloon catheter is kept inside until it comes out on its own or until the next gynaecological examination.
- Amniotomy or opening of the amniotic sac – the amniotic sac is artificially opened during a gynaecological examination when the cervix is sufficiently dilated. Once the water breaks, spontaneous uterine contractions will commence or a medicinal product is injected into the vein to simulate contractions.
- Intravenous medicinal product, synthetic oxytocin – functions in a similar manner to the natural hormone of the same name. The medicinal product is administered as an intravenous infusion and used once the cervix has dilated to support uterine contractions. The dose can be increased as needed to induce regular contractions.

When is it necessary to induce labour?

Labour should be induced when the gains outweigh potential risk.

Inducing labour may be necessary in the following cases:

- The patient has a concomitant illness, such as elevated blood pressure, diabetes, pre-eclampsia, etc., which compromises the pregnancy.
- The pregnancy is longer than normal – the risk of intrauterine death increases after week 42.
- Problems related to the foetus, e.g. various growth issues, abnormal volume of amniotic fluid, changes in the condition of the foetus, potential illnesses of the foetus.
- Your water breaks – if your water breaks and contractions do not start within 24 hours, there is an increased risk of infection to you and your baby. This indication does not apply upon premature birth when the lungs of the foetus must be prepared with special treatment before childbirth.
- The intrauterine death of the foetus.

What are the potential risks of inducing labour?

There are usually no major complications involved with inducing labour.

Sometimes the patient may develop a fever, get chills and diarrhoea and start to vomit or experience uterine tachysystole after taking misoprostol. If uterine contractions are too frequent, the patient is given intravenous medicinal products to relax the uterus. Misoprostol is not safe to use if the patient has previously had a c-section – it may cause the rupture of a previous uterine scar.

Use of a balloon catheter increases the risk of intrauterine infection.

In rare cases, the administration of oxytocin may cause the blood pressure to drop, tachycardia or an increased heart rate, hyponatremia or low sodium concentration in the blood, which may lead to headaches, loss of appetite, nausea, vomiting, stomach pain, fatigue and drowsiness.

Compared with spontaneous delivery, induced labour involves an increased risk of having a long birth, instrumental vaginal delivery (vacuum or forceps assisted birth), postpartum bleeding, uterine rupture, uterine tachysystole, which may worsen the condition of the foetus and cause umbilical cord prolapse and premature detachment of the placenta.

What if induction of labour does not work?

The timeline for inducing labour may differ depending on the person. Labour will usually start within 24-72 hours.

Sometimes more than one method has to be used.

The methods used might not have the same effect on different patients or may take a different amount of time to work. If the cervix does not dilate as a result of inducing labour, your doctor will discuss further options with you. These may include carrying on with inducing labour, making use of another method or undergoing a c-section.

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