## The Latent Phase of Labour



In order to make the discussion about the latent phase more understandable, let's first briefly go through low-risk childbirth and the stages of labour.



#### A low risk labour

- Low risk birth means:
  - Vaginal birth between weeks 37-42 of pregnancy
  - When the risk remains low risk during first and second stage of labour
  - Spontaneous birth, with the baby's head as the presenting part (NO induction)
  - No previous birth-related complications
  - Birthing person is generally healhty or has no conditions that would affect the treatment of the birth

## The course content is primarily applicable to low risk births.

However, it's important to note that the principles of managing the latent phase can also be applied in the care of high-risk births when appropriate monitoring is in place.

## The stages of labour

#### First stage: dilatation

- Divided into the latent phase and the active phase of dilatation
- During this stage the cervix dilates up to 10cm

#### Second stage: Pushing

• Begins when the cervix is dilated to 10cm, and the presenting part has descented into the pelvis, and ends with the birth of the baby

#### Third stage: afterbirth

 Starts immediately after the baby's birth and lasts until the delivery of the placenta and fetal membranes.

## What is the latent phase?

The latent phase is considered part of the process of cervical dilation during labor but not part of the active phase of labor.

The latent phase refers to a stage in labor where cervical dilation occurs at a significantly slower pace compared to the active phase, and contractions may already be fairly regular.

However, a characteristic of the latent phase is that even if contractions have become regular, they may subside or stop altogether.

## Prolonged latent phase

Prolonged latent phase refers to a situation in which, for primiparas, contractions have been continuously ongoing for over 20 hours, and for multiparas, for over 18 hours, with no significant cervical dilation during that time.

As the latent phase prolongs, the birthing person may become fatigued even before the active phase begins.



# The World Health Organization's definition of the latent phase

- 1. The birthing person experiences painful contractions
- 2. The cervix is dilated to 5cm or less

You can use this definition in your course studies!



# Identifying the Latent Phase of Labour



Identifying the latent phase is one of the midwife's most challenging tasks, so it's not surprising if the birthing person themselves is unsure whether the labor is in active phase or still in the latent phase.



#### "False labour"

"False labor" is a separate concept from the latent phase and can be especially difficult to distinguish, particularly in cases of prolonged latent phase.

During false labor, the birthing person often experiences irregular and painful contractions for hours, but these contractions do not efface or dilate the cervix. Painful and irregular contractions in false labor most often spontaneously subside or stop altogether.

"False labor" does not indicate the onset of labor, in contrast to the latent phase of labor.

#### Interviewing

The most important part of identifying the latent phase always occurs before any examination.

The purpose of the interview is to assess the birthing person's situation, whether it's a phone call or an in-person conversation.

A good phone interview is also the only way to identify a potential latent phase when the birthing person contacts the maternity hospital from home.

Inquiring about the frequency and intensity of contractions is crucial.

## What should be determined during the interview?

- 1. Find out the onset time of contractions, their frequency, and their intensity.
- 2.Determine if the birthing person can still manage at home. You can use the VAS pain scale, but please note that the birthing person may still be able to cope with pain at home even if the VAS scale suggests otherwise. It's a good idea to inquire about any pain relief methods used at home and suggest other possible options for home comfort.
- 3.Ensure that the birthing person understands the instructions you provide. You can ask them to repeat the instructions to confirm their understanding.

More detailed guidance on managing the latent phase will be covered in later presentations.

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#### The well-being and coping of the birthing person

The birthing person's ability to cope refers to their perceived capability to manage the situation. The sense of capability is influenced by the birthing person's experiences with the safety of their environment, the availability of care, and the intensity of pain.

Various measures, such as the VAS pain scale or a coping assessment tool, can be utilized to evaluate the birthing person's ability to cope.

Assessing the birthing person's ability to cope is crucial when determining the appropriate time to transfer to the maternity hospital.

If the birthing person feels that they can still manage at home and consider their home a safe place to wait for labor to progress, and if the pain relief methods used at home are sufficient, there is no need to rush to the hospital during the latent phase.

#### Labour contractions vs. Braxton Hicks

- •Strong and intensify from one contraction to the next
- Typically associated with pain
- •Occur regularly with contractions usually at least 10 minutes apart
- Indicative of the onset of labor

- Painless tightening of the uterus
- •Irregular contractions with intervals usually exceeding 10 minutes
- •Do not indicate the onset of labor
- •often described as sensations of uncomfortable abdominal tightening



Latent phase contractions are indeed considered labor contractions, although they are typically less painful, weaker, less frequent, and shorter in duration compared to contractions during the active phase of labor.



### Internal examinations

Internal examinations are considered one of the most significant methods for identifying the birthing person's latent phase because most definitions of the latent phase are based on a specific degree of cervical dilation.

However, it's essential to always consider whether the information obtained from the examination holds value in the context of the birthing person's care at that point or if another method might be more suitable. Internal examinations often cause discomfort for the birthing person and increase the risk of infection.

For example, the utility of external examinations should be considered. If the presenting part is still mobile at the upper opening of the birth canal, it can be assumed that the fetus has not descended deeply into the pelvis yet.



As mentioned earlier, identifying the latent phase can be challenging, and often it can only be confirmed retrospectively, when the birthing person was indeed in the latent phase.



## Treatment of the latent phase



The treatment of the latent phase is a broad entity and includes guidance, confrontation, presence and pain management

An important role in the treatment is played by the support person of the birther and the midwife

The goal of latent phase's treatment is to reach the active stage of childbirth

- In 2021, 99.3% of births in Finland took place in hospital
- In Finland, medical care is governed by various laws
- "Good care" is high-quality and patient-safe care



- The best place during the latent phase is at home
  - If a woman goes to hospital during latent, there is an increased risk of unnecessary interventions.
- It is good for the mother to stay at home if she feels safe
- Pain management is also possible at home
- Studies show that latent-stage pain management did not differ significantly between the hospital and the home



- In the latent phase, birthers benefit from rest and relaxation
- Low-risk birthgivers are advised to eat and drink normally during latent phase and delivery
- Support from a support person/midwife during the latent phase
  - emotional, informational, concrete, appreciative and social support
  - Even more important than medical pain relief



- Latent phase management is a broad entity that is essentially guided by laws, international recommendations, and organization-specific management guidelines
- By supporting the birther's own resources, avoiding unnecessary interventions, being present and engaging the birther in decision-making, the midwife can contribute to the creation of a positive birth experience



## Interventions during labour



#### medicalisation

The medicalized and hospital-centered approach to pregnancy and childbirth often leads to birthing individuals being in the hospital during the latent phase. This early transfer to the hospital frequently results in a chain of unnecessary childbirth interventions.

To avoid or delay interventions, home is the best place during the latent phase for as long as possible.

Being at home has a positive impact on both the birthing person's experience and the natural progression and outcome of labor.



## Interventions during labour

- Interventions during labour include all the interventions that interfere with the natural course of childbirth
- Interventions, when properly timed, may be necessary, but when done without a valid reason, they disrupt the natural course of labour and increase the risk of problems during labour
- Every intervention made lowers the threshold for the next one!



## Interventions during labour

- Induction (medication/balloon catheter/!!diskiisio!!)
- Cardiotocography
- Listening of fetal heartbeats
- Vaginal and external examinations
- Invasive Pain Relief Methods
- Cannulation, IV-hydration
- Restrictions on eating and drinking

- "Hands on" –method in second stage of labour
- Episiotomy
- Assisted delivery with ventouse or forceps, section
- Helping the afterbirth's by pulling the cord
- Pressing the womb after birth



# Interventions during latent phase



- Induction of labour is one of the most common obstetric procedures
- The goal of the induction is to mature the cervix and stimulate contractions before spontaneous start-up of the delivery
- An induction is initiated for either maternal or fetal reasons when the risks of continuing the pregnancy outweigh the risks of the startup itself
- In Western countries, about one in four births are inducted, and the share of inductions is constantly increasing



Childbirth can be inducted for medical or psychosocial reasons.

#### <u>Psychosocial reasons</u>

- Fear of childbirth
- Exhaustion of woman in labour
- Long distance to hospital
- Previous rapid birth

#### Medical reasons

- Overdue pregnancy
- Amniocentesis in full-term pregnancy without spontaneous contraction activity starting in 24h
- Pre-eclampsia
- Hypertension during pregnancy
- Fetus is small/large for gestational age (SGA/LGA)
- Serious disease of pregnant woman
- Cholestasis of pregnancy
- Multiple pregnancy
- Diabetes of pregnant woman
- Fetus mortus
- Blood group immunization
- Chorioamnionitis
- Suspicion of fetal deterioration



#### balloon catheter:

 a catheter is placed between the amniotic membranes and the uterine wall, the end of which is filled with NaCl  $\rightarrow$  the ball settles to press the cervix between the offering part and the cervix  $\rightarrow$ Causes mechanical stretching of the cervix and increases the secretion of endogenous prostaglandins

#### Prostaglandin:

- Cytotec/ misoprostol
- Oral or vaginal administration

#### Amniotomy:

• = puncture of the fetal membranes with a mechanically sharp instrument → causes amniotic fluid flow → the volume of the uterus decreases, and the birther's own contraction activity starts better

#### Oxytocin:

- The hormone that causes contractions
- Can be used at Induction as well as in the promotion of labour
- Continuous CTG monitoring!



The induction increases the risks of...

... hyperstimulation of uterus

... uterine rupture

... umbilical cord prolapse

... procedures during labour

... postpartum infections

... postpartum atony



#### CTG

CTG = Cardiotocography = Continuous fetal monitoring

- Recording of fetal heart rate at the same time as uterine contractions
- Two sensors are placed on the abdomen of the mother, one to monitor the heart rate of the fetus and the other to monitor the contraction of the uterine muscle
- After the rupture of the fetal membranes internal monitoring can also be installed (spiral electrode), in the offering part of the fetus



#### CTG

- Interpretation of the CTG curve requires training
- The basic level of fetal heart rate, long- and short-term heart rate variability, heart rate accelerations, and possible slowdowns are noted from the curve
  - Contractions are noted in terms of their frequency and duration
- Changes in fetus' heartbeat need to be noted with contraction-curve



#### ctg

- A reliable CTG curve is at least 20 minutes long, it contains heart rate variability, and the baseline fetal heart rate is normal
- A normal, reactive heart rate curve indicates a greater than 95% probability that the fetus is doing well at the time of the examination



#### External examination

- External examination provides a general overview of the uterine and fetal condition
- External examination can be used to assess the position of the fetus in the womb, to estimate the amount of amniotic fluid and the size of the fetus
- The size, shape, tenderness and contractility of the uterus are also assessed by palpation of the uterus



#### Leopold's maneuvers

- At first feel the base of the uterus (fundus)
- When the fetus is in a vertex presentation, in fundus there's a stern that is solid, round and slightly uneven
- When the fetus is in a breech position, in fundus there's a harder, rounder, smoother and larger head of fetus

- Next, feel the sides of the uterus and find out which side the fetal back is on
- The back feels flat, the opposite side feels uneven
- You can also ask the mother if she feels kicks clearly on the other side; so, there are the "small parts", i.e., the legs and hands

- The last thing to feel is the offering part of the fetus above the symphysics
- In this case, the height of the offering part is also estimated; whether it is still moving or attached



#### Vaginal examinaton

- Vaginal examination can be used to assess the progress of childbirth
- In a vaginal examination, the midwife takes her fore and middle fingers to the vagina of the birthgiver and looks for the cervix
- The vaginal examination is used to assess the opening of the cervix, the loss of the canal, the height of the offering part and its position
- A vaginal examination can be an unpleasant and painful examination for the patient, and it should always be justified to be performed
- Communication with the patient during vaginal examination is important



#### Remember:

- Monilla rutiininomaisilla interventioilla voi olla vain rajattu tai epävarma hyöty matalan riskin synnyttäjälle spontaanin synnytyksen aikana. Ammattilaisten tulisi tukea synnyttäjää ja perhettä saavuttamaan tavoitteitaan ennen synnytystä ja sen aikana vähemmän invasiivisin, ja perheen omia voimavaroja ja työkaluja hyödyntävin keinoin.
- Considered interventions that are deemed necessary should be appropriate and informed consent of the instigator should be obtained



# Pain relief during latent phase



# Good and decent pain management is an important part of treatment of latent phase

During the latent phase, the birthgiver can become significantly sore

Good pain management during labour brings about a sense of safety and advances a positive birth experience.



Pain management during latent phase primarily consists of supporting, guiding, and non-pharmacological pain relief methods

non-pharmacological pain management and positional therapy are good latent treatment methods at home before coming to the hospital



# During the first two stages of childbirth, the birthgivers experience two types of pain:

#### Visceral pain

- Pain is difficult to locate, as it is reflected over a wide area
- During childbirth is mostly due to contractions of the uterus and the opening of the cervix
- The pain radiates to the lower abdomen, lower back and thighs

#### Somatic pain

- The pain is easier to locate
- The descent of the fetus in the pelvis causes somatic pain
- It is felt, for example, as a feeling of pressure and tissue tension



#### non-pharmacological pain relief methods

- Relaxing (breathing, a gentle touch, massage)
- Variation of positions
- cold/hot
- Water
- Sterile water injections
- Tens



# Relaxing

- Calm breathing
  - Guided, calm breathing improves fetal and maternal oxygen supply
  - The birthgiver has something specific to focus on
  - Long-term hyperventilation can cause a lack of oxygen in the fetus
  - Light touch, brushing, compression, massage, acupuncture and acupressure
  - Muscle relaxation improves blood circulation and at the same time the prerequisites for the progress of childbirth improve

#### Variation of positions

- Variations in posture can take away pressure from tissues and nerves
- Different good aids;
  - Bouncy ball, nut ball, rocking chair
- Upright position
  - Promotes childbirth better than lying down, as the offering part of the fetus weighs heavily on the cervix
  - Less pressure on ligaments, sacral nerves and joints than lying down
    - → less pain
  - May reduce the need for epidural anesthesia later in childbirth

#### Heat therapy and water

- Heat relieves unpleasant sensations in the musculoskeletal system
  - It is possible to use the heat pack in a variety of different areas of pain throughout childbirth
  - Some birthers benefit more from a cold pack that can be used like a heat pack
- Hydrotherapy, i.e. bath or shower, can promote relaxation of the body by relieving muscle tension and easing pain sensations
  - In a bath, the birther may feel weightless, which makes it easier to move and get a more comfortable position

#### Sterile water injections

- Sterile water is injected into or under the skin of the affected area
- The effectiveness of the blisters is based on Gate Theory: the pain caused by the blisters displaces the contractile pain
- effectivity is best when the blisters are in the pain area or in its immediate vicinity
- The blisters can be repeated as many times as necessary



#### Tens

- =Transcutaneous electrical nerve stimulator
- Power is based on low-volt electrical impulses that affect the central nervous system's pain regulation system
- Reduces labour pain and can shorten the duration of the active phase of labour



#### pharmacological pain relief methods

- Oral analgesics
- Oxycodone
- Nitrous oxide (laughing gas)
- local anesthetic



#### Painkillers

- <u>Metamizole sodium</u> and/or <u>paracetamol</u>, may be used as the first medical pain treatments in the latent phase
- Oxycodone is a strong opioid that acts through the central nervous system and is well tolerated by birth givers
  - Can be administered into subcutis or intramuscularly
  - The most common side effect is a mild sedative in the parturient, which is usually undesirable
  - May cause limited variability in fetal heart rate, but is harmless



# Nitrous oxide (laughing gas)

- Nitrous oxide is a mixture of nitrous oxide and oxygen, the ratio of which is regulated, for example, 60% nitrous oxide and 40% oxygen
- The nitrous oxide is inhaled from the oxygen mask, its inhalation is started as soon as the sensation of contraction begins, and after the contraction, normal room air is breathed



#### local anesthetic

- Possible obstetric anesthetics include epidural and spinal anesthesia, paracervical anesthesia and pudendal anesthesia
- obstetric anesthetics are commonly used in the active phase of childbirth
- There is conflicting research on the effect of early-onset epidural anesthesia on the course of labour
  - There is no reason to deny a sore birther an epidural anesthesia,
     citing the premature stage of labour



# Knowledge and understanding of one's own body sensations helps to tolerate pain

Good pain management supports a sense of coping



# The importance of guidance and interaction in treating the latent phase



The latent phase of labour is a significant part of the childbirth process, and guidance and interaction during that time plays a crucial role in the childbirth experience of the birthing person and their support persons.

The purpose of guidance is to provide information, support, and safety for the birthing person and to ensure the smooth progress of labour.



## The power of knowledge

Information helps in understanding the changes and sensations occurring in one's own body, as well as in preparing for them. Therefore it is advisable to provide information even before the onset of labour so that the birthing person knows what to expect.

This way, the birthing person can be as relaxed and open-minded as possible during the latent phase.

#### oxytocin

Oxytocin plays a crucial role in childbirth and onset of labour.

Oxytocin stimulates contractions that soften and efface as well as shorten and later dilate the cervix. Contractions also help the baby in descending.

Oxytocin regulates the intensity and duration of contractions, which directly affects the progress of labour.

Uncertainty and the resulting stress can even inhibit the natural secretion of oxytocin and, therefore, the progression of labour.

#### endorphins

During labour the body produces soothing and pain-relieving endorphin hormones.

A higher level of endorphins can help the birthing person enter into their own mental state, aiding in preparation for and coping with the process of labour.

#### adrenaline

The fear, tension, fatigue, and pain experienced by the birthing person also increase the secretion of adrenaline in the body, which, in turn, can suppress contractions.

If the birthing person does not feel safe, excessive adrenaline secretion can also trigger the so-called 'fight or flight' response. Adrenaline can also replace the important and necessary oxytocin.

#### Supporting hormone levels in the latent phase leading up to labour:

- Staying both yourself and keeping your surroundings calm, comfortable and trusting.
- Avoiding distractions, unwanted individuals, noise and uncomfortable procedures.
- Staying upright and utilizing gravity to help the baby descend and put pressure on the cervix and tissues.
- Delaying or avoiding invasive pain relief methods.
- Being informed and prepared.



The birthing person's sense of safety ensures that there is increased oxytocin production, endorphin levels rise and adrenaline levels remain sufficiently low.

For this reason, providing information about the stages of childbirth even during pregnancy is of utmost importance.



For example in birth preparation classes it is important to go through the latent phase of labour so that the birthing person and their family understand what it is, know what to expect, and how to prepare for it. Additionally, it is useful for the birthing person to recognize the latent phase as well as be able to utilize relaxation and pain relief techniques at home.



# The Wishes and needs of birthing persons



While many birthing individuals manage well at home during the latent phase, and interventions are generally not initially required during this phase of labour, many birthing individuals feel the need for a professional assessment, presence, and encouragement.

Proposes to stay home are often met with resistance due to feelings of insecurity and lack of control.

Birthing persons hope to have some control over their care during the latent phase while also having access to professional assistance and receiving advice and guidance.

Birthing persons in the latent phase seek information and assurance regarding whether their labour has begun and whether their experiences are normal.

Receiving reliable and relevant information about the progression of labour and pain relief methods supports birthing individuals during the latent phase.

Emotional support and guidance for both the birthing person and their support person are important methods in the management of the latent phase.

These methods assist in better tolerating the pain of childbirth, maintaining the "birth bubble", and overall improving the childbirth experience.



#### The role of the midwife in guidance



# The midwives' most important tools in guidance of latent phase

information

respect

Authentic presence

Active listening

compassion

compliments

Informed consent



- Introduce yourself to the birthing person and their support person, and ask them how they would like to be addressed
- Offer the information clearly and in a understandable manner
- Respect and encourage the birthing person's own wishes.
- Respond to the birthing person's individual needs.
- Be genuinely present and listen actively.
- Empathize with the birthing person's situation.
- Praise the birthing person! Encourage and reassure.
- Explain any necessary procedures and obtain informed consent



Since home is typically the best place during the latent phase, it is important to provide information to the birthing person and their family in advance.

One of the midwife's most important tasks in treating and guiding the latent phase is communication and providing information.



The midwife's guidance skills during the latent phase become particularly prominent in practice, for instance during phone calls, when the birthing person contacts the maternity hospital to contemplate the onset of labour and coming to the hospital.

During the call, the midwife assesses the birthing person's situation and the stage of labour as individually as possible, while also considering the hospital's resources and instructions.



During the call the midwife inquires about the starting time, duration, frequency of contractions, possible rupture of membranes, and fetal movements.

Usually, coming to the hospital is requested when contractions are approximately one minute in duration, occurring regularly at intervals of less than ten minutes, and/or when the birthing person feels they cannot manage at home.

The instructions given are influenced by various situations and differing guidelines between hospitals (pain, bleeding, rupture of membranes).

In this call, it is essential to listen to the birthing person's feelings, and the call is approached on an individual basis.

At this point, identifying the latent phase is important, but it does not always determine the instructions provided.



# Does it matter whether the birthing person is in the latent phase when they arrive at the hospital?



#### Yes, because...

Studies show that if the person arrives at the hospital in the latent phase, the risk of unnecessary intervention and interference with the natural course of labour increases significantly.





#### however:

# The primary measure for staying home is the coping and well-being of the birthing person.

Regardless of whether it is necessary or advisable for the birthing person to go to the hospital, if they do not feel capable, they have the right to come to the hospital.

## The latent phase can and should be treated effectively within the hospital as well.

The treatment and empathetic interaction should not be dependent by the stage of labour they are in.