

INTRODUCTION TO HUMAN DEVELOPMENT-II

Unit 2

Topic 3: Types of Birth

Submitted by:

Ms. Nupur Bhatnagar

Process of Birth

- Childbirth, also known as labour and delivery. About 266 days after conception, there is release of various hormones and the process that leads to birth begins. One critical hormone, Oxytocin from the mother's pituitary gland is released which leads to periodic contractions in the uterus.
- During the prenatal period, the uterus which is composed of muscle tissue, slowly expands as the foetus grows.
- When the time of birth is near, the uterus begins to contract in periodic intervals.
- The contractions force the head of the baby towards the cervix and the birth canal. In a **Normal type of delivery**,
- Labour takes place in three stages:

1st stage : **Early and active labor**

- In the first stage, the uterine contractions initially occur around every 8 to 10 minutes and last about for 30 seconds each.
- This first stage of labour is the longest.
- Usually the labour takes 16 to 24 hours.
- As labor proceeds, the contractions occur more frequently and last longer.
- The cervix will dilate from 6 centimeters to 10 cm.
- The legs might cramp and the mother may experience increasing pressure in the back.
- The amniotic sac ruptures which is also known breaking of water.

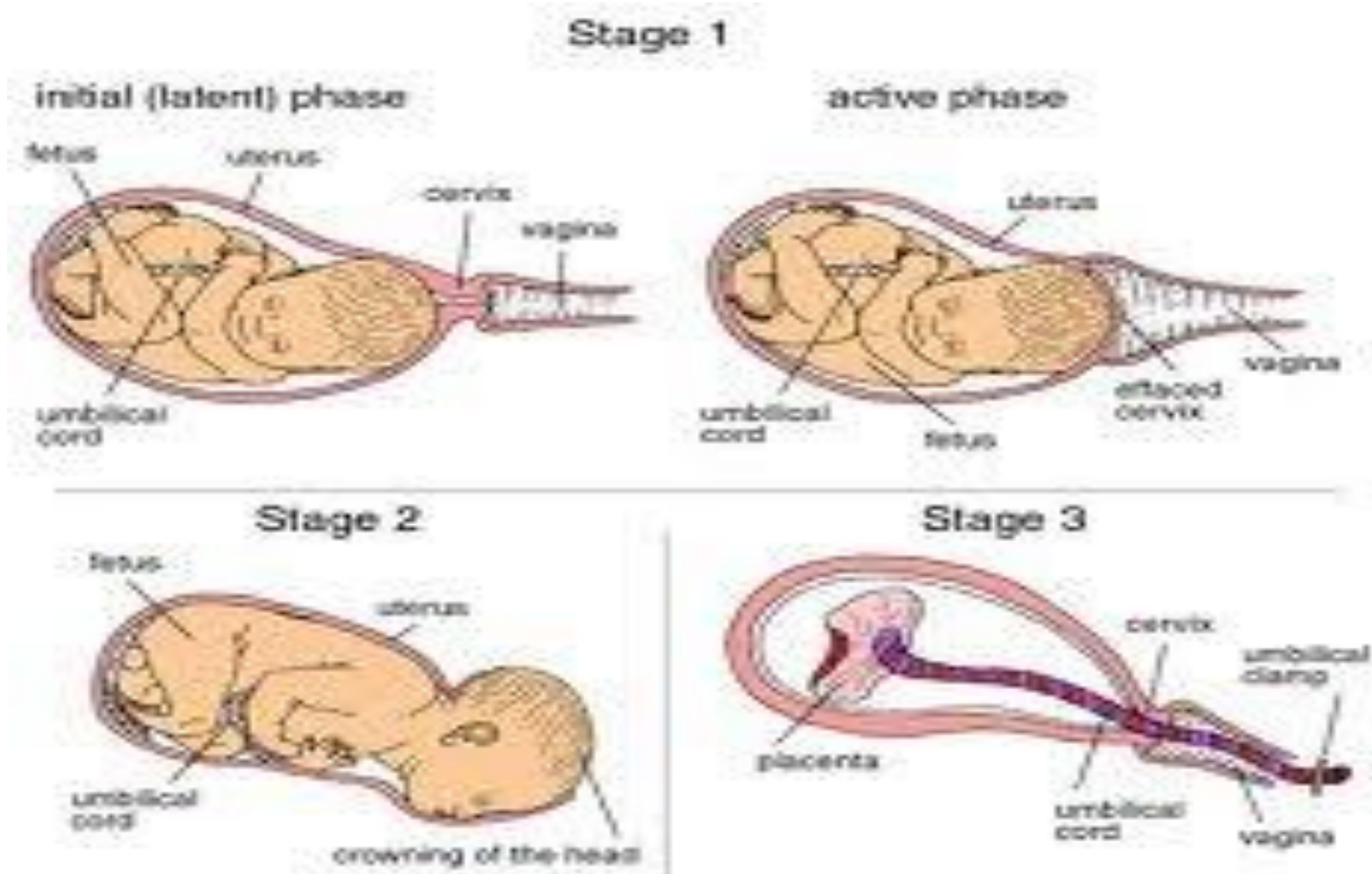
2nd Stage: The birth of the baby

- During the second stage of labour, which lasts about 90 minutes, the baby's head proceeds further with each contraction, increasing the size of the vaginal opening.
- Towards the end of the labour, the contractions occur every 2 minutes and last almost 2 minutes.
- In a normal delivery, the foetal presentation is cephalic, that is head first.
- After the baby's head is delivered, the rest of the baby's body will follow shortly.
- The second stage ends when the baby has fully left the mother's body.

3rd Stage: **Delivery of the placenta**

- This stage is the quickest and easiest , taking a few minutes.
- In the third stage of labour, the child's umbilical cord is still attached to the mother and the baby and the placenta is expelled from the mother. The placenta is typically delivered in five to 30 minutes
- The mother continues to have mild contractions. They will be close together and less painful.
- The mother is asked to push one more time to deliver the placenta. She may be given medication before or after the placenta is delivered to encourage uterine contractions and minimize bleeding.
- Any remaining fragments must be removed from the uterus to prevent bleeding and infection.
- After you deliver the placenta, your uterus will continue to contract to help it return to its normal size.

Process of Birth in a Normal Delivery



Cesarean delivery

- A cesarean delivery is also known as C-section.
- In this type of delivery, the baby is surgically removed from the uterus, rather than traveling through the birth canal.
- Cesarean delivery (C-section) is a surgical procedure used to deliver a baby through incisions in the abdomen and uterus.

Cesarean deliveries are mostly done in the following cases:

- **If the baby is in distress:** When the foetus shows distress of some sort like sudden increase or decrease in heart rate or if blood flows from the mothers vagina during labour.
- **Maternal age :** Mothers over the age of 40 are more likely to have C sections than younger women.
- **If the baby or babies are in an abnormal position:** C sections are also done when the baby is in breech position i.e. feet first in the birth canal rather than head first. Breech position births place the baby at risk because the umbilical cord is more likely to be compressed , depriving the baby of oxygen.

- **The baby or babies are in an abnormal position:** Cesarean deliveries also take place in case of transverse position birth, in which the baby lies crosswise in the uterus, or when the baby's head is too large that it has trouble moving through the birth canal.
- **Your labor isn't progressing:** Stalled labor is one of the most common reasons for a C-section. Stalled labor might occur if your cervix isn't opening enough despite strong contractions over several hours.
- **If the mother is carrying multiples:** A C-section might be needed if the mother is carrying twins and the leading baby is in an abnormal position or if she has triplets or more babies.
- **There is a problem with the placenta:** If the placenta covers the opening of the cervix, a C-section is recommended .
- **Prolapsed umbilical cord:** A C-section might be recommended if a loop of umbilical cord slips through the cervix, ahead of the baby.
- **In case of a previous C-section:** Depending on the previous type of incision and other factors, it is recommended to have a C section the second time.

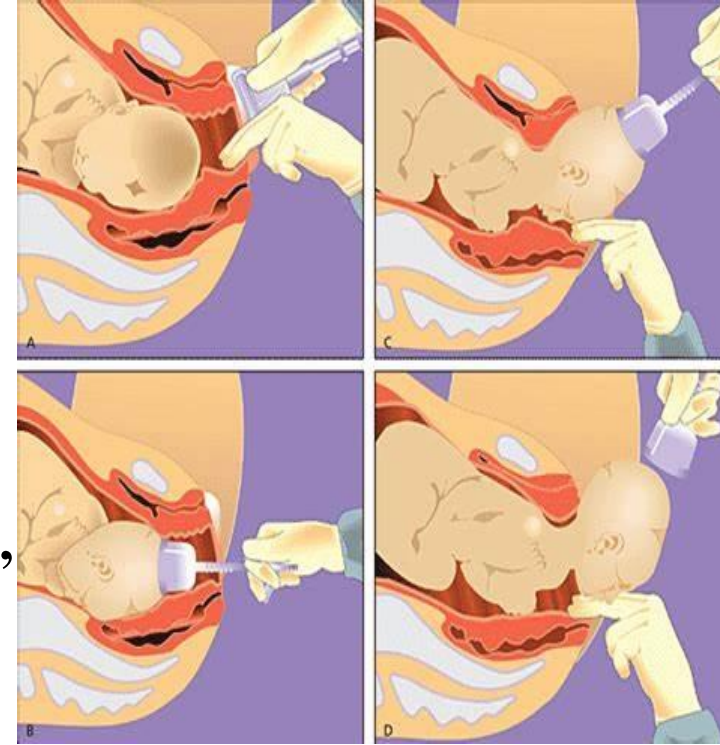
The Procedure of a C section

- **Abdominal incision.** Once the anesthesia has taken effect, the stomach is be swabbed (cleaned) with an antiseptic, and the doctor will make a small, horizontal incision in the skin above your pubic bone (sometimes called a "bikini cut"), through the abdominal wall.
- The doctor will cut through the underlying tissue, slowly working her way down to the uterus. When she reaches the abdominal muscles, she'll separate them (usually manually rather than cutting through them) and spread them apart to expose the uterus underneath.
- **Uterine incision.** The uterine incision is then made usually horizontally across the lower part of the uterus.
- **Delivery.** The baby will be delivered through the incisions. The doctor will clear the baby's mouth and nose of fluids, then clamp and cut the umbilical cord. The placenta will be removed from the uterus and the incisions will be closed with stitches. The stitches used to close the incision in your uterus will dissolve. The final layer – the skin – may be closed with stitches or staples, which are usually removed three days to a week later.

- A C-section takes between 45 minutes to an hour. Extracting the baby is usually quite fast, between 5 to 15 minutes. Closing the uterus and stomach takes a lot longer than opening up, usually about 30 minutes.
- The mothers recovery can be lengthy and the risk of maternal infection is higher .
- A C-section presents some risk for the baby. The relatively easy passage of cesarean babies through the birth canal may stop the release of certain stress related hormones that help the newborn (neonate) to deal with the stress of the outside world.

Assisted delivery

- An assisted birth is when forceps or a suction cup are used to help deliver the baby.
- A ventouse (vacuum extractor) is an instrument that is attached to the baby's head by suction. A soft or hard plastic or metal cup is attached by a tube to a suction device. The cup fits firmly onto the baby's head.
- During a contraction and with the help of your pushing, the obstetrician or midwife gently pulls to help deliver the baby.
- A ventouse isn't used if the mother is giving birth at less than 34 weeks pregnant because the baby's head is too soft. It is less likely to cause vaginal tearing than forceps.



Forceps

- Forceps are smooth metal instruments that look like large spoons or tongs. They are curved to fit around the baby's head. The forceps are carefully positioned around the baby's head and joined together at the handles.
- With a contraction and pushing, an obstetrician gently pulls to help deliver the baby.
- There are different types of forceps. Some are specifically designed to turn the baby to the right position to be born, such as if the baby is lying facing upwards or to one side.
- Forceps are more successful than ventouse in delivering the baby, but a ventouse is less likely to cause vaginal tearing.
- Thus, the different types of Birth

