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Spontaneus labor



**General Medicine Obstetrics and Gynecology
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Spontaneus labor

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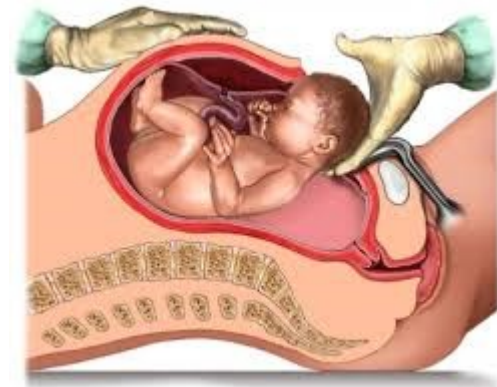
Definition

- Childbirth - : is the culmination of a pregnancy period with the expulsion of one or more new born infants from a womans

- vaginal birth



Caesarean section



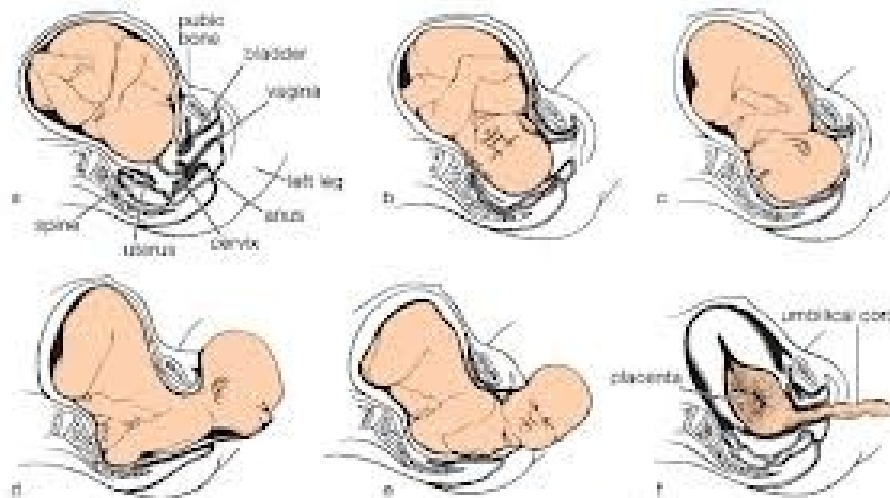
Vaginal birth

- **Six phases of a typical vertex (head-first presentation) delivery:**

Engagement of the fetal head in the transverse position. The baby's head is facing across the pelvis at one or other of the mother's hips.

Descent and flexion of the fetal head.

Internal rotation. The fetal head rotates 90 degrees to the occipito-anterior position so that the baby's face is towards the mother's rectum.



- **Delivery by extension.** The fetal head passes out of the birth canal. Its head is tilted forwards so that the crown of its head leads the way through the vagina.
- **Restitution.** The fetal head turns through 45 degrees to restore its normal relationship with the shoulders, which are still at an angle.
- **External rotation.** The shoulders repeat the corkscrew movements of the head, which can be seen in the final movements of the fetal head.

First stage

- **1. latent phase** - is generally defined as beginning at the point at which the woman perceives regular [uterine contractions](#)
- **2. active phase:** confers an accelerated cervical dilation.
 - Bishop score – the cervical dilatation, effacement and station
 - Full dilation is reached when the cervix has widened enough to allow passage of the baby's head, around 10 cm dilation for a term baby.
 - active phase averages some 8 hours^[23] for women giving birth to their first child ("primiparae") and shorter for women who have already given birth ("multiparae").

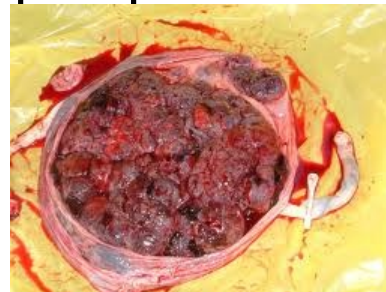
Score	0	1	2
Cervical dilatation (cm)	<1	1-2	3-4
Length of cervix (cm)	>2	1-2	<1
Station of presenting part (cm)	Spines -3	Spines -2	Spines -1
Consistency	Firm	Medium	Soft
Position	Posterior	Central	Anterior

Second stage – fetal expulsion

- This stage begins when the cervix is fully dilated, and ends when the baby is born.
- At the beginning of the normal second stage, the head is fully engaged in the pelvis; the widest diameter of the head has passed below the level of the [pelvic inlet](#)
- The second stage of birth will vary by factors including [parity](#) (the number of children a woman has had), fetal size, anesthesia, and the presence of infection

Third stage – delivery of the placenta

- [Placental expulsion](#) begins as a physiological separation from the wall of the uterus.
- The average time from delivery of the baby until complete expulsion of the placenta is estimated to be 10–12 minutes dependent on whether active or expectant management is employed
- Active management is described as the administration of a [uterotonic](#) drug within one minute of fetal delivery, controlled traction of the umbilical cord and [fundal](#) massage after delivery of the placenta
- active management of the third stage of labour in all vaginal deliveries to help to prevent postpartum [hemorrhage](#)



Postpartum period (puerperium)

- is the period beginning immediately after the birth of a child and extending for about six weeks.

Breech birth

- A **breech birth** is the [birth](#) of a baby from a **breech presentation**, in which the baby exits the pelvis with the [buttocks](#) or [feet](#) first as opposed to the normal [head-first presentation](#).
- Categories: **Frank breech** – the baby's bottom comes first, and his or her legs are flexed at the hip and extended at the knees (with feet near the ears); 65–70% of breech babies are in the frank breech position
- **Complete breech** – the baby's hips and knees are flexed so that the baby is sitting crosslegged, with feet beside the bottom
- **External cephalic version** is a process by which a [breech baby](#) can sometimes be turned from buttocks or foot first to head first. It is usually performed after about 37 weeks
- In this procedure hands are placed on the mother's [abdomen](#) around the baby. The baby is moved up and away from the [pelvis](#) and gently turned in several steps from breech, to a sideways position, and finally to a head first presentation.



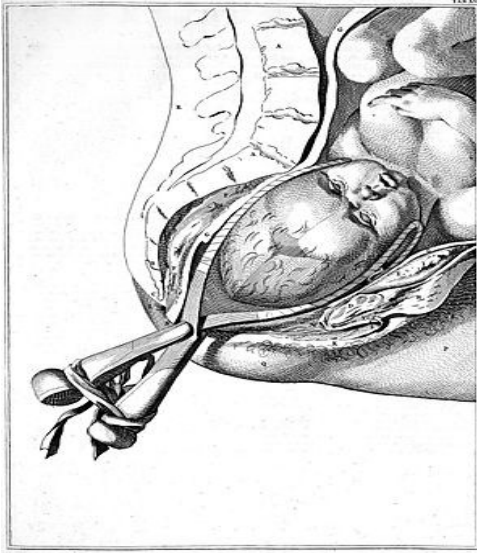
Instrumental delivery (forceps, ventouse

- **Forceps** are a surgical instrument that resembles a pair of tongs and can be used in surgery for grabbing, maneuvering, or removing various things within or from the body.^[1] They can be used to assist the [delivery](#) of a [baby](#)
- Obstetric forceps consist of two branches that are positioned around the fetal head
- Many types of forceps – Simpson, Elliot, Kielland
- Advantages to forceps use include avoidance of C-sect, reduction of delivery time, general applicability with cephalic presentation. Complications include the possibility of bruising, deformation, [rectovaginal fistula](#), nerve damage, [Descemet's membrane](#) rupture (extraordinarily rare),^[10] skull fractures, and cervical cord injury.

Instrumental delivery – vacuum extraction

- **Ventouse** is a [vacuum](#) device used to assist the delivery of a [baby](#) when the second stage of [labour](#) has not progressed adequately
- It cannot be used when the baby is in the [breech position](#) or for [premature births](#).
- **Positive aspects** - An [episiotomy](#) may not be required.
 - The mother still takes an active role in the birth.
 - No special [anesthesia](#) is required.
 - The force applied to the baby can be less than that of a forceps delivery, and leaves no marks on the face.
 - There is less potential for maternal trauma compared to forceps and caesarean section.
- **Negative aspects** - The baby will be left with a temporary lump on its head, known as a [chignon](#).
 - There is a possibility of [cephalohematoma](#) formation, or subgaleal hemorrhage.

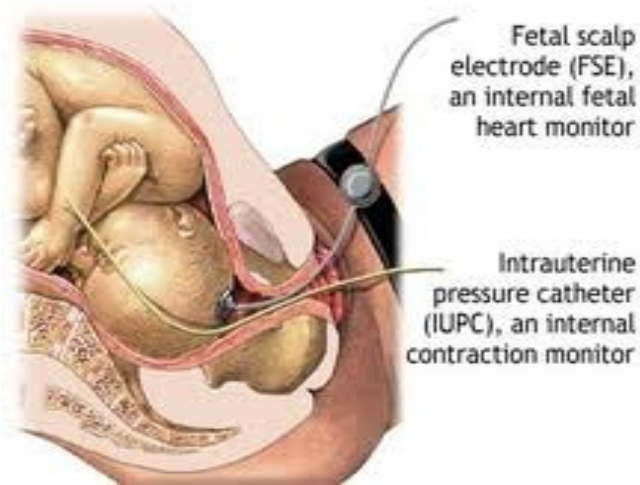
Instrumental delivery



Monitoring

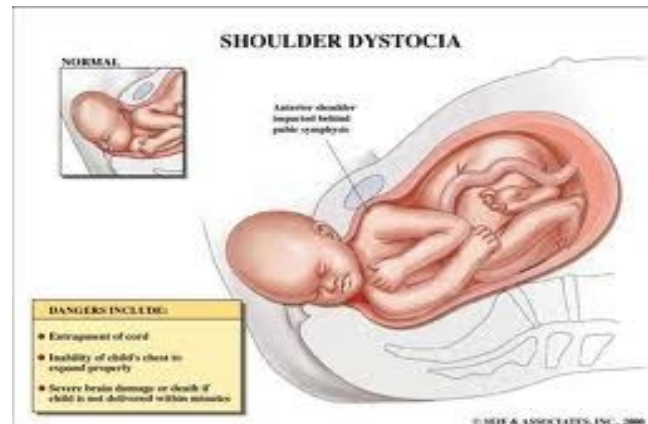
- A method of external foetal [monitoring](#) (EFM) during childbirth is [cardiotocography](#), using a *cardiotocograph* that consists of two sensors: The *heart* (cardio) sensor is an [ultrasonic sensor](#), similar to a [Doppler fetal monitor](#), that continuously emits ultrasound and detects motion of the fetal heart by the characteristic of the reflected sound.
- The pressure-sensitive *contraction* transducer, called a *tocodynamometer* (toco) has a flat area that is fixated to the skin by a band around the belly.
- More invasive monitoring can involve a [foetal scalp electrode](#) to give an additional measure of fetal heart activity, and/or [intrauterine pressure catheter](#) (IUPC).

monitoring



complication

- Childbirth is an inherently dangerous and risky activity, subject to many complications.
- The second stage of labour may be delayed or lengthy due to:
 - malpresentation ([breech birth](#) (i.e. buttocks or feet first), face, brow, or other)
 - failure of descent of the fetal head through the pelvic brim or the interspinous diameter
 - poor uterine contraction strength
 - active phase arrest
 - [cephalo-pelvic disproportion](#) (CPD)
 - [shoulder dystocia](#) - is a dystocia in which the anterior shoulder of the infant cannot pass below the [pubic symphysis](#) or requires significant manipulation to pass below it



DĚKUJI ZA POZORNOST