The Woman Who Develops a Complication During Labor and Birth

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A difficult labor – dystocia – can arise from any of three main components of the labor proces:

- The power (contractions)
- The passenger (the fetus)
- The passageway (the birth canal)

Ineffective uterine force

- Uterine contractions are the basic force moving the fetus through the birth canal
- Contractions occur because of interplay of enzymes, electrolytes, proteins and hormones
- About 95 % of labors are completed with contractions that follow a predictable, normal course. When they become abnormal or ineffective, ineffective labor occurs

Hypotonic Uterine Contraction

- The number of contractions is usually low or infrequent (not increasing beyond two or three in 10 min)
- The resting tone of the uterus remains less than 10 mm Hg
- Strength of contractions does not rise above 25 mm Hg
- Analgesia may occur hypotonic contractions
- Hypotonic contractions may occur in the uterus which overstretched (Multiple pregnancy, large fetus, hydramnios)
- Oxytocin may be done
- In a first hour in postpartal period palpate the uterus and assess lochia every 15 min

Hypertonic Uterine

- Uterus never fully relaxes between contractions (myometrium do not repolarize)
- Resting tone increased more than 15 mm Hg
- Strong, painful, ineffective contractions
- Contributing factor – maternal anxiety
- Needed – rest, hydratation, sedation
- Hypertony can cause fetal anoxia

Uncoordinated Contractions

Applying a fetal and a uterine external monitor and assessing the rate, pattern, resting tone and fetal response to contractions for at least 15 min reveals the abnormal pattern. Oxytocin administration may be helpful

Prolonged latent phase

This taken place when the latent phase more long that 20 hours (14 in multipara). It s occur when cervix is not “ripe” at the beginning of labor. Adequate fluid infusion, morphine and oxytocin may be done

Protracted Active Phase

- Is usually associated with Cephalopelvic Disproportion (CPD)
- Cervical dilatation less than 1.2 cm\hour (1.5 cm for multipara)
- Active phase long than 12 hour (6 hour in multipara)
- If CPD c – section necessary
- If CPD not exist – oxytocine can be prescribed

Prolonged Deceleration Phase

Deceleration phase more than 3 hour in nullipara and 1 hour in multipara. This is like usually a result from abnormal fetal head position. A cesarean birth is frequently requred

Secondary Arrest of Dilatation has occurred if there is no progress in cervical dilatation for more than 2 hours

Arrest of Descent

Arrest of descent result when no decent has occurred for 1 hour an a multipara and 2 hours in single fetus. It has occurred when descent of the fetus does not begin. Cesarian birth is usually nesessary

If the woman more than 11 hours in labor without food, glucose may be ad to iv fluids. If the woman in middle labor she may be allowed to drink carbohydrate fluid (orange juice) or to eat a light meal. It could be allow to suck lolli-pops during labor, coz it s giving additional glucose. A full bladder prevent descent of the fetus. Woman should void every 2 hours minimum. Test the void frequently during the labor for glucose, protein, ketones.

It is impossible to prevent all dysfunctional labor

Contraction Ring

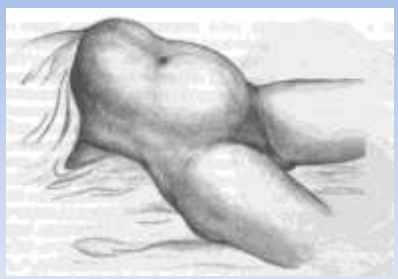
Two types of contraction ring can occur:

- simple type, which can occur at any point of myometrium, most common pathologic retraction ring (Bandl's ring). Usually appears in second stage. Cased by uncoordinated contractions, wrong administration of oxytocin, medical manipulations, loss of placenta. Administration of IV morphine and cesarian birth

Precipitate Labor

- Occurs when the contractions so strong, that woman giving birth just with few contractions.
- Cervix dilatation 5 cm\hour (1 cm 12 minutes)
- Multipara - 10 cm\hour (1 cm every 6 minutes)
- Subdural hematoma in fetus may be

Uterine Rupture

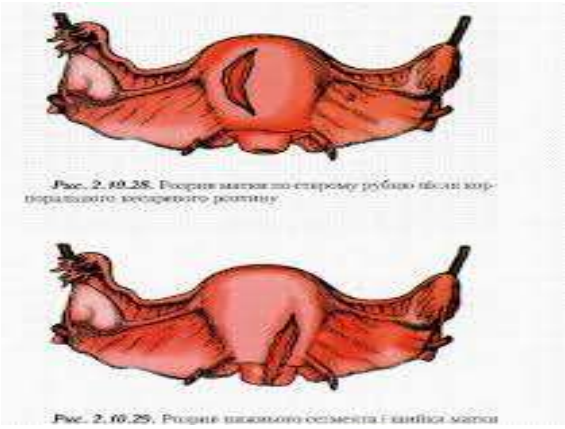


Uterine Rupture

- It s rare problem during the labor (1 in 1 500 birth)
- Making 5 % of maternal death
- Rupture occurs when a uterus undergoes more strain than it is capable (as usually happened in a place where the vertical scar exist)
- Contributing factors : prolong labor, abnormal presentation, multiply gestation, unwise use of oxytocin, traumatig maneuvers
- When the rupture occurs, fetal death will follow, unless immediate cesarean birth
- The woman will experienced high level of pain, after a contractions will stop and the "ring will show in the abdomen"
- Possible vaginal bleeding, decreasing maternal blood pressure, absent FHR

Uterine Rupture

It s an EMERGENCY CONDITION. This condition need to anticipate use of IV oxytocin to attempt to contract the uterus and minimize bleeding. Immediately need to be started fluid and electrolyte therapy. Woman in a future advising to not be pregnant, coz it can coz again same situation



Inversion of the Uterus

Refers to the uterus turning inside out either birth of the fetus or delivery of the placenta

Inversion of the Uterus

- 1 in 15 000 births
- if the traction is applied to the umbilical cord to remove the placenta
- if pressure applied to the uterine fundus
- if placenta attached the fundus
- Oxitocin stop to giving
- Woman will immediately giving the fluid therapy, and preparing for cardiopulmonary resuscitation
- Manual replacement the uterus, after administrated the oxytocin
- Woman will need the antibiotic to prevent the inflammation of endometrium
- In the future the woman will advise to have a c-section

Prolapse of the Umbilical Cord

Umbilical Cord Prolapse

Prolapse of the Umbilical Cord

It tends to occur most often with the following conditions:

- Premature rupture of membrane
- Fetal presentation other then cephalic
- Placenta previa
- Intrauterine tumors preventing the presenting part from engaging
- A small fetus
- Hydramnios
- Multiply gestation

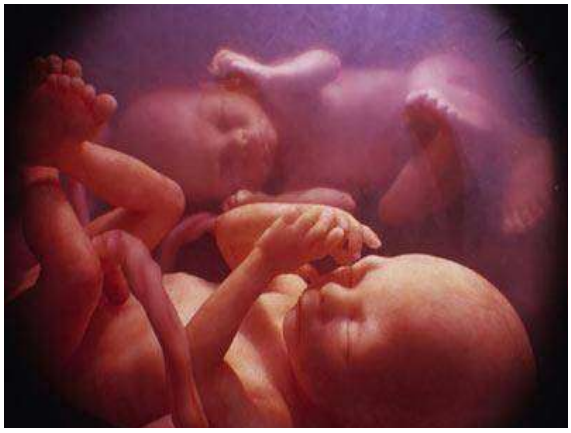
Prolapse of the Umbilical Cord

Cord prolapse automatically leads to cord **compression.**

Immediately it s need to make less pressure to the cord, for this or the doctor or midwife will put her glow dressed hand into the vagina and put back the cord, or put the woman on knee-chest position or trendelenburg position

Nursing Care in Prolapsed Umbilical Cord

Multiple Gestation



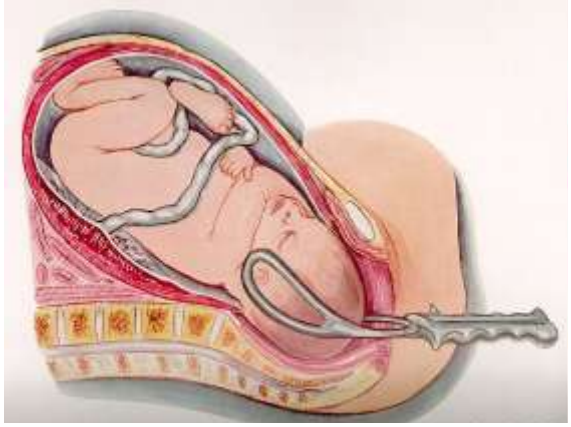
Multiple Gestation

- This condition as usually need an additional personal in the birth room (nurses, pediatricians or neonatal nurse)
- Better to make a cesarean birth to prevent the anoxia of second fetus
- Assess the woman's hematocrit level and blood pressure
- Pregnancy end usually before the term
- Because the babies always small, the head engagement usually not coming, but prolapse of the cord more often

Multiple Gestation

- The first fetus usually present vertex
- After the first infant is born, both ends of the baby's cord are tied or clamped (if the infant has a same cord)
- The first infant is identified as A, and newborn care is started for him or her
- Most twin pregnancies present with both twins vertex
- If the first infant birth, but other still in uterus the oxitocin not administrated

Forceps

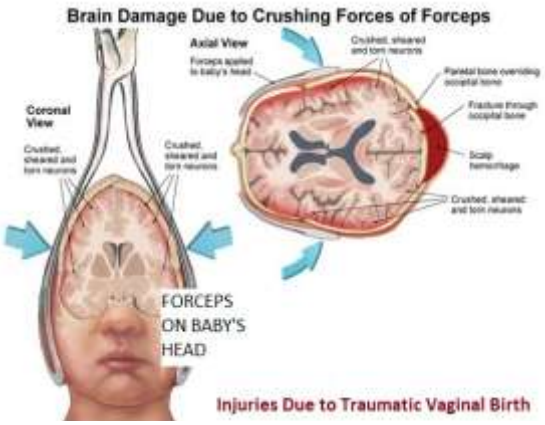


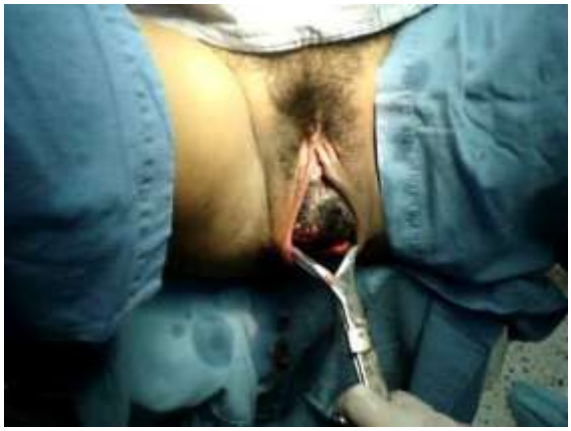
The Conditions for Using Forseps

- Cervix full opened
- The membrane have been ruptured
- Alive fetus
- CPD must not be present
- Woman s bladder show be empty

Complications of forceps delivery

1. Maternal lacerations
2. Minor external ocular trauma
3. Retinal hemorrhage
4. Fetal skull fractures
5. Facial nerve palsies
6. Cephalhematoma
7. Subaponeurotic hemorrhage
8. Intracranial hemorrhage
9. Scalp laceration





Vacuum Extraction

Vacuum Extraction Forbidden in preterm babies

Macrosomia (oversized fetus)

Macrosomia (oversized fetus)

- Size may become a problem in a fetus who weight more than 4 000 to 4 500
- As usually in a woman who has a gestation diabetes or diabetes mellitus
- In multipara
- In a obese woman
- The perinatal mortality (15 % compared with the normal 4%)
- High risk of pospartal hemorrage, coz uterus can not contract as readily

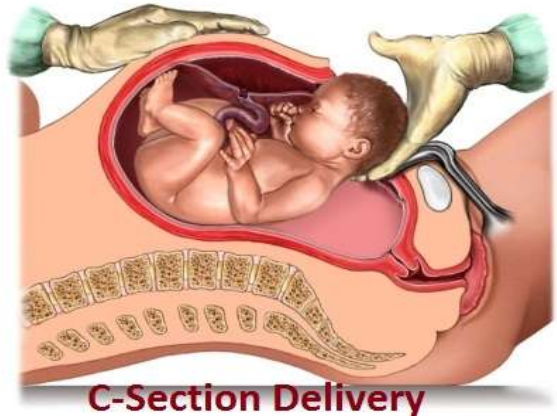
Cesarean Section

Indications for c - section

- Wrong presentation
- Hard bleeding
- Placental failure
- Uterus dysfunctional
- Pre-eclampsi
- Herpes genitalis
- C – section in a past
- Age of the woman 35 +
- FDS
- Prolapse of cord
- Placenta previa

Patient preparation

- Lab tests should be done (inc. blood group and Rh)
- Emptying bladder and enema
- Cleaning of perineum
- Informed consent should always be obtained
- The patient should be well hydrated
- Prophylactic antibiotics are usually given prior to skin incision
- Monitoring mother and fetus
- Infusion therapy starting, bladder cateterisated



Cesarean postoperative care

- Controlling the vital signs
- Controlling the afteroperative hemorrhage
- Control for fundus, discharge color, quality and amount
- After operation to normalize fluid – electrolyte balance
- Teaching mother for breast - feading

Thank you for your attention