**Problems related to childbirth**

**Dystocia**

Dystocia involves contractions that are irregular in strength, timing or both

End result is ineffective cervical dilation

Hypertonic contractions-

-Hypotonic contractions

**Hypertonic Labor Pattern**

-Uterine contractions of poor quality

Resting tone of the myometrium decreases. Contractions become more frequent -

-Contractions are painful but ineffective in dilating and effacing the cervix.

-Usually occurs in latent phase, and may greatly prolong latent phase of labor

 **Risks to the mother and fetus**

**Maternal**

Increased discomfort

Physically exhausted

Emotionally discouraged

Dehydrated

Poor coping

**Fetal**

Cephalohematoma

 Caput succedaneumبديل

Non reassuringامان fetal status

Poor blood flow to and from placenta

**Clinical management**

Provide with COMFORT MEASURES

-Warm shower

Mouth Care-

Imageryتخيلات-

Music-

-Back rub, therapeutic touch

Mild sedation

Bed rest or position changes

Hydration

Tocolytics to reduce high uterine tone

**Hypotonic labor**

Occurs after active labor has been established; can be due to malposition of fetus or large fetus

Maternal exhaustion, fatigue, poor coping

 **Maternal and Fetal Risks**

**Maternal**

Maternal exhaustion

Post partum hemorrhage

Uterine infection

**Fetal**

Non-reassuring fetal status

Fetal sepsis

**Clinical management**

Active management of labor

Timed cervical exams

Amniotomy AROM

Augmented labor with Pitocin

IV hydration

Careful monitoring of fetal health, checking for presence of meconium, FHR etc.

Emotional support very important

**Precipitous labor and birth**

Labor that lasts less than 3 hours

Rapid descent of the presenting part, resulting in birth

Unexpected, sudden and often unattended birth

Contributing factors include multiparity, previous precip birth, small fetus

**Risks to mother and fetus**

Loss of coping abilities

Lacerations

Amniotic fluid embolism

Postpartal hemorrhage

Lacerations of cervix and/or perineum

Fetal distress

Poor utero-placental perfusion

Cerebral trauma

Pneumothorax

**Post term pregnancies**

Gestation beyond 42 weeks

Higher incidence in primips, advanced maternal age

**Maternal & Fetal Risks**

**Maternal**

Large for Gestational Age ( LGA) infant (macrosomia)

Increased incidence of forceps-assisted, vacuum-assisted, or cesarean birth

Increased psychological stress

Probable labor induction or C/S

**Fetal**

Decreased placental perfusion (NST and BPP used to assess fetal risks)

Fetal distress

Oligohydramnios

Meconium aspiration

Macrosomia related hypothermia and hypoglycemia

**Fetal mal-presentation or mal position**

Occiput posterior 5%

Brow presentation 0.02%

Face presentation < 0.2%

Breech presentation 3-4%

Breech presentation

-Frank breech

-Complete breech

-Footling breech

Shoulder presentation Transverse Lie 0.3%

Compound presentation 0.5%

**Clinical management**

Close monitoring of mother and fetus

Position changes of mother may help

Possibility of external cephalic version

Careful monitoring of FHT, amniotic fluid, fetal distress, cord prolapse, especially with breech presentations

Possibility of midline episiotomy

Forceps may be required for position change and/or delivery

Cesarean section may be required

**Macrosomia**
Defined as weight > 4000g

Incidence greater in; genetic predisposition, male infants, infants of diabetic women, prolonged gestation, grand multiparous

Identify before onset of labor

Major cause of CPD (Cephalo- Pelvic Disproportion)

Monitor for s/s dystocia

Assisted birth or C/S may be necessary

**Risks to mother and fetus**

**Maternal**

CPD

Dysfunctional labor

Post partum hemorrhage

Lacerations

**Fetal**

Fetal distress, meconium aspiration

Shoulder dystocia, Erb’s palsy

Hypoglycemia

Hypothermia

**Premature Rupture of Membranes**

Rupture of the amniotic sac before the onset of true labor, regardless of the length of gestation

Exact cause is unclear

**Possible Causes**:

• Infections of the vagina or cervix

• Chorioamnionitis و السلي التهاب المشيمه

• Incompetent cervix

**Shoulder Dystocia**

An uncommon obstetric emergency that increases the risk for fetal and maternal morbidity and mortality during the attempt to deliver the fetus vaginally.Here the head is born, but the anterior shoulder cannot pass under the pubic arch.

**Causes :**

Fetopelvic disproportion related to excessive fetal size

Maternal pelvic abnormalities

Fetus may have birth injuries like brachial plexus damage, fracture of the humerus(arm) or clavicle, asphyxia,

**Clinical Management**

Close Fetal monitoring during labor for early decelerations, fetal descent

Provide support and encouragement for laboring mother and partner

Monitor for postpartal complications ; hemorrhage d/t uterine atony

Administer IV oxytocin post delivery

**Prolapsed Cord**

Occurs when the cord lies below the presenting part of the fetus.

May be occult, hidden or complete prolapsed.

May be due to a long cord, malpresentation, transverse lie, or unengaged presenting part.

Keep mother on Trendelenburg or Knee-chest position to keep pressure of the presenting part off the cord.

Cord compression causes fetal hypoxia

Immediate intervention required

Bed rest after ROM

Manual decompression, O2 via mask, knee-chest position or bed in Trendelenberg position

If mother not fully dilated , C/S required

**Amniotic Fluid Complications**

Normal amniotic fluid amount is 800-1000 mL @ 36-37 weeks

 **1. Polyhydramnios** > 2000 mL fluid

 Increased risk of C/S birth, many factors, may be chronic or acute

Associated with maternal Diabetes, Rh sensitization and multiple pregnancy.

Associated with Fetal malformations and preterm birth

Mal-presentation and prolapsed cord may occur

Ultrasound and amniocentesis used to manage poly-hydramnios.

**2.Oligohydramnios**

Associated with post maturity, placental insufficiency, fetal malformation, especially renal.

Close monitoring of fetus via BPP, serial ultrasounds, non-stress test.

Amnioinfusion may be performed after ROM

**3.Amniotic Fluid Embolism**

 occurs when amniotic fluid is drawn into the maternal circulation and carried to the woman’s lungs.

 The fetal particulate matter like skin cells, vernix , hair, meconium in the fluid, obstructs pulmonary vessels.

**Risk Factors:**

 Oxytocin administration

 Abruptio placenta

 Polyhydramnios

 **Complications:**

 Abrupt respiratory distress

 Heart Failure

 Circulatory collapse

 Disseminated Intravascular Coagulation

**Management :**

 Cardiopulmonary Resuscitation

 Oxygen with mechanical ventilation

 Blood transfusion

 Correction of coagulation deficits with platelets or fibrinogen

**Uterine Rupture**

Spontaneous or traumatic rupture of the uterus

**Etiology:**

Rupture of a previous C-birth scar

Prolonged labor

Injudicious use of Pitocin -- overstimulation

Excessive manual pressure applied to the fundus during delivery

**Signs and Symptoms:**

Sudden sharp abdominal pain, abdominal tenderness

Cessation of contractions

Absence of fetal heart tones

Shock

**Therapeutic Interventions:**

Deliver the baby ! / Cesarean Delivery

**Perineal lacerations**

Perineal, vaginal wall, cervix, & lower uterine segment. Assess for cervical laceration/ hematoma if bright red bleeding with firm fundus.

**Perineal lacerations**

 1st degree extends through skin

 2nd degree extends through muscle

 3rd degree extends to the anus

 4th degree into the rectal wall