

Childbirth Complications

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

Increased discomfort •

Physically exhausted •

Emotionally •
discouraged

Dehydrated •

Poor coping •

Cephalohematoma •

Caput succedaneum •

Non reassuring fetal •
status

Poor blood flow to and •
from placenta

Clinical management

Provide with COMFORT MEASURES •

Warm shower

Mouth Care

Imagery

Music

Back rub, therapeutic touch

Mild sedation •

Bedrest 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 exhaustion

Post partum
hemorrhage

Uterine infection

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 uteroplacental perfusion ◦

Cerebral trauma ◦

Pneumothorax ◦

Postterm pregnancies

Gestation beyond 42 weeks , Higher incidence in primips, advanced maternal age

LGA infant (macrosomia) •

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

Increased psychological •
stress

Probable labor induction •
or C/S

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

CPD •

Dysfunctional labor •

Post partum •
hemorrhage

Lacerations •

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
- 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.

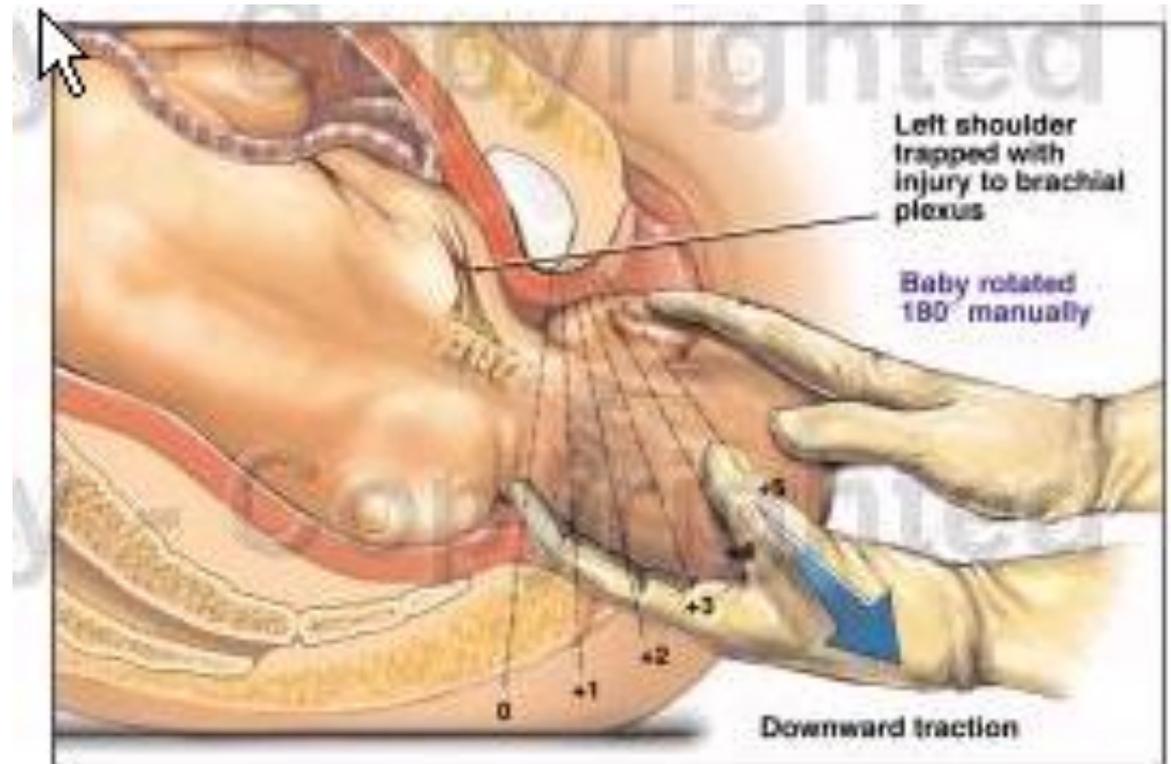
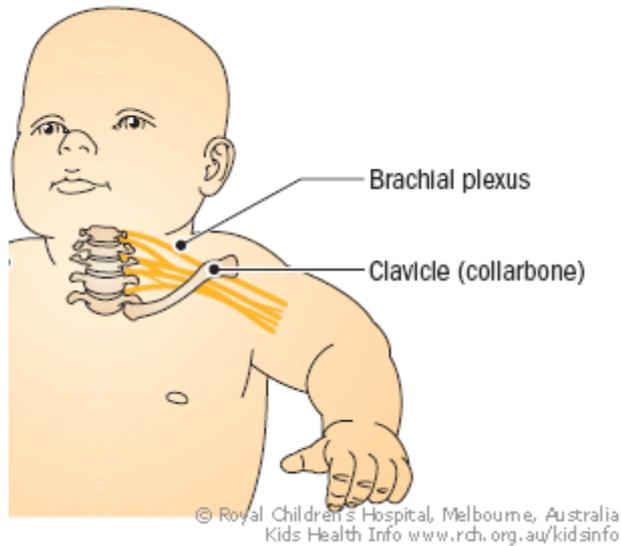
Causes :

- Fetopelvic disproportion related to excessive fetal size

- Maternal pelvic abnormalities

- ◆ Fetus may have birth injuries like brachial plexus damage, fracture of the humerus or clavicle, asphyxia,

Shoulder dystocia with brachial plexus injury



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.

Prolapsed 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

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 polyhydramnios.

Amniotic Fluid Complications

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

Amniotic Fluid Embolism •

occurs when amniotic fluid is drawn into the maternal circulation and carried to 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