Complications of Labor and Delivery

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Dystocia

- - painful, difficult, prolonged delivery
- The primary causes are problems related to:
  a. Passenger (fetus)
  b. Power (uterine contractions)- force that propels the fetus
  c. Passageway (pelvis)

  Primary dystocia: occuring at the onset of labor

  Secondary dystocia: occuring later in labor

- Complications:
  - A. maternal dehydration
  - B. postpartal infection
  - C. hemorrhage
  - D. infant mortality

Common causes of Dysfunctional Labor

- 1. inappropriate use of analgesia (excessive or too early)
- 2. Pelvic bone contraction
- 3. Poor fetal position
- 4. Extension rather than flexion of the fetal head
- 5. Overdistention of the uterus

- 6. Cervical rigidity
- 7. Presence of full rectum, ovarian tumor, distended bladder that impedes fetal descent
- 8. Mother becoming exhausted from labor
- 9. Primigravid status

- Assessment:
    1. excessive abdominal pain
    2. abnormal contraction pattern
    3. fetal/maternal distress
    4. lack of progress in labor

Lengths of Phases and Stages of Normal Labor in Hours

	Nullipara		Multipara	
Phase	Average	Upper normal	Average	Upper normal
Latent	8.6	20	5.3	14
Active	5.8	12	2.5	6
Second stage	1	1.5	0.25	-

Problems with the force of Labor (Power)

Dysfunction with the First Stage of Labor

- Prolonged latent phase may be due to:

a. unriped cervix

b. Excessive use of analgesia early in labor

Management: fluids to prevent dehydration

morphine to relax the uterus

amniotomy

oxytocin infusion

Cesarean birth

- Protracted active phase – maybe due to A.cephalopelvic disproportion
- B. fetal malposition
- C. ineffective uterine activity

- Cervical dilatation in nullipara – should be at a rate of 1.2 cm/hr
- Cervical dilatation in multipara – 1.5 cm/hr

- Arrest in cervical dilatation – if there is no progress in cervical dilatation for more than 2 hours.

Dysfunction at the Second Stage of Labor

- Prolonged descent:
  - Nullipara – rate of descent is < 1 cm/hr
  - Multipara – rate of descent is < 2 cm/hr

- Arrest in descent – no descent
  - Nullipara – 2 hours
  - Multipara – 1 hours

  - CPD – cause for arrest in descent during the second stage of labor

Contraction Rings

A. Physiologic retraction ring – simple constriction ring occuring at any point in the myometrium and at any point during labor

B. Pathologic retraction ring (Bandl's ring) – occurs at the junction of the upper and lower uterine segments

- -warning sign that severe dysfunctional labor is occuring – if not relieved, the lower uterine segment may rupture
- Management: CS

Precipitate Labor and Birth

- - occur when uterine contractions are so strong that the woman gives birth with only a few, rapidly occuring contractions
- Labor completed less than 3 hours
- Contributory factors:
- 1. multiparity
- 2. induction of labor after amniotomy
- 3. induction of labor after oxytocin infusion

Uterine Rupture

- Contributing factors:
- 1. prolonged labor
- 2. abnormal presentation
- 3. multiple gestation
- 4. irrational use of oxytocin
- 5. obstructed labor
- 6. forceps delivery

- Signs and symptoms:
  a. localized tenderness and pain over the lower uterine segment
  b. lack of uterine contractions
  c. fetal distress
  d. maternal distress

  Management: Laparotomy

Uterine inversion

- - refers to the uterus' turning inside out with either birth of the fetus or delivery of the placenta
- Assessment:
- 1. sudden gush of blood
  - Hypotension · dizziness
  - Pallor · diaphoresis
- 2. fundus is not palpable in the abdomen

- Management:
  1. Attempt to replace an inversion –
  2. ? Attempt to remove the placenta if it is still attached
  3. Start IV line
  4. O2 support by mask
  5. Assess vital signs
  6. Administer antibiotics as prescribed.
  7. Administer tocolytics via IV as prescribed.

Problems with the fetus (Passenger)

Problems with the Passenger

Prolapsed Cord

- - loop of the umbilical cord slips down in forn of the presenting fetal part
- Contributory factors:
    1. PROM
    2. Fetal presentation other than cephalic
    3. Placenta previa
    4. Intrauterine tumors
    5. A small fetus
    6. Presenting part that has not engaged
    7. Hydramnios
    8. Multiple gestation

- Assessment:
  - Cord visible at the vulva
  - Variable deceleration FHR – cord compression

  Management:

  1. Always assess fetal heart sounds immediately after rupture of the membranes.
  2. Cover any exposed portion with a saline compress to prevent drying.

Multiple Gestation

- Complications:
  1. Anemia
  2. Pregnancy-induced hypertension
  3. Uterine atony
  4. hemorrhage

Problems with Position, Presentation or Size

- Most common fetal malposition: ROP/LOP
- Breech presentation

  Types:
- 1. complete
- 2. frank
- 3. footling

- Complications of breech presentation:
  1. Anoxia
  2. Intracranial hemorrhage
  3. Fracture of the spine or arm
  4. Dysfunctional labor
  5. Early rupture of the membranes

- Causes of Breech presentation:
- 1. Gestational age less than 40 wks
- 2. Abnormality in a fetus (such as anencephaly, hydropcephalus, meningocele)
- 3. Hydramnios
- 4. Congenital anomaly of the uterus
- 5. Any space-occupying mass in the pelvis
- 6. Pendulous abdomen
- 7. Multiple gestation

- External cephalic version – the fetus is rotated by external pressure to a cephalic lie

Problems with the Passage

- Cephalopelvic disproportion
- Manner of delivery: C/S