Chapter 15
Complications of Labor and Birth

Preterm Labor

• Associated factors
  • Poor prenatal care
  • Infections, including periodontal infections
  • Nutritional status
  • Sociodemographics

(Cont’d)

Preterm Labor

(Cont’d)

• Signs and symptoms
  – Uterine cramping (menstrual-like cramps)
  – Abdominal cramping (with or without nausea, vomiting, diarrhea)
  – Any vaginal bleeding
  – Clear or tan vaginal fluid leakage
  – Vaginal or pelvic pressure
  – Low back pain
  – Thigh pain (intermittent or persistent)

(Cont’d)
Preterm Labor

• Assessment and management
  – Fetal fibronectin

Preterm Labor

• Assessment and management
  – Stopping preterm labor
  • Identifying and treating infection
  • Ensuring hydration
  • Restricting activity
  • Tocolytic drugs
  • Communication to reduce maternal anxiety
  • Fetal surveillance
  • Promotion of fetal lung maturity
    • Glucocorticoids 24-48 hrs before delivery
    • Surfactant to newborn after delivery

(Cont’d…)

Preterm Labor

(…Cont’d)

• Nursing care and pharmacologic therapy
• Home care management
Premature Rupture of Membranes (PROM)

- Nitrazine paper test
- Management
  - Bedrest with BRP
  - Observe for infection (chorioamnionitis)
  - Fetal surveillance
  - Antibiotics
  - Steroids (fetal lung maturity)
  - Prepare for home management, if applicable

Dystocia (Dysfunctional Labor)

- Powers (uterine contractions)
  - Hypotonic dysfunction
  - Hypertonic dysfunction
Dystocia (Dysfunctional Labor)

- Passage (pelvis)
  - Abnormal size or shape

Dystocia

- Passenger
  - Cephalopelvic disproportion (CPD)
    - Fetal presenting part too large to pass through woman's pelvis

Dystocia

- Abnormal fetal presentation
  - Breech
  - Face/brow
  - Persistent occiput posterior
  - External version
Dystocia

• Abnormal fetal presentation
  – Breech
  – Face/brow
  – Persistent occiput posterior
  – External version

(Cont'd…)

(Cont'd…)

Psyche (psychologic factors)

• Fear of pain
• Nonsupport
• Embarrassment
• Violation of religious rituals
Induction and Augmentation of Labor
• Induction: measures to initiate uterine contractions before they begin spontaneously
• Augmentation: use of oxytocic drug after spontaneous but ineffective labor has begun
• Reasons for induction
  – Maternal indications
  – Fetal indications
• Contraindications

Induction and Augmentation of Labor
• Methods of induction
  – Cervical ripening: Bishop's score (Cont’d…)

Induction and Augmentation of Labor
• Nonpharmacologic methods
• Pharmacologic methods
• Oxytocin induction and augmentation
Induction and Augmentation of Labor

- Oxytocin induction and augmentation

Episiotomy

- Surgical incision made in perineum to permit easier passage of the fetus
  - Midline
  - Mediolateral
  - Perineal lacerations

Assisted Vaginal Delivery

- Forceps
- Vacuum extraction
Assisted Vaginal Delivery

Postterm Labor and Birth

• Maternal risks
• Fetal risks

Precipitate Labor

• Labor completed in less than 3 hours from onset of true labor to delivery of infant
Uterine Rupture

- Causes: previous cesarean delivery; aggressive or poorly supervised induction; prolonged labor with CPD
- Signs and symptoms: persistent UCs without periods of relaxation; sharp pain in suprapubic area; symptoms of shock, fetal distress and severe bleeding.
- Complications: maternal hemorrhage and fetal death
- Treatment
  - Immediate uterine surgery; possible hysterectomy

Prolapsed Umbilical Cord

- Umbilical cord precedes fetal presenting part
- May be occult (hidden), inside vagina, or extend below vulva
- Contributing factors
  - ROM before fetal engagement; polyhydramnios
  - Small fetus
  - Breech presentation
  - Transverse lie
  - Unusually long cord
  - Multifetal pregnancy

Nursing interventions
- Place woman’s hips higher than her head
- Push fetal presenting part away from cord
- Oxygen 8-10 L/min per face mask
- Closely monitor FHR by EFM
- Prepare for rapid vaginal delivery or cesarean section
Multifetal Pregnancy

- Preterm labor common r/t overdistention
- Increased risk of postpartum hemorrhage
- Cesarean birth more common
- Twin-to-twin transfusion syndrome
- Multifetal pregnancy reduction
- Risk of disseminated intravascular coagulation (DIC)

Cesarean Birth

- Birth is accomplished through abdominal and uterine incision; to preserve life or health of mother and/or fetus

Cesarean Birth

- Indications (Box 15-1 on page 249)
- Surgical techniques
  - Skin incisions: transverse (Pfannenstiel) or vertical; not indicative of uterine incision
  - Uterine incisions: lower segment—less risk of subsequent uterine rupture; possibility of VBAC
Cesarean Birth

(Cont’d)

• Complications/risks
• Preparation
• Nursing care
  — Preoperative
  — Newborn
  — Postoperative
• Postpartum

Cesarean Birth

• Vaginal birth after cesarean (VBAC)
  — Trial of labor (TOL)
  — Not indicated if previous fundal scar (classic CS) or evidence of CPD