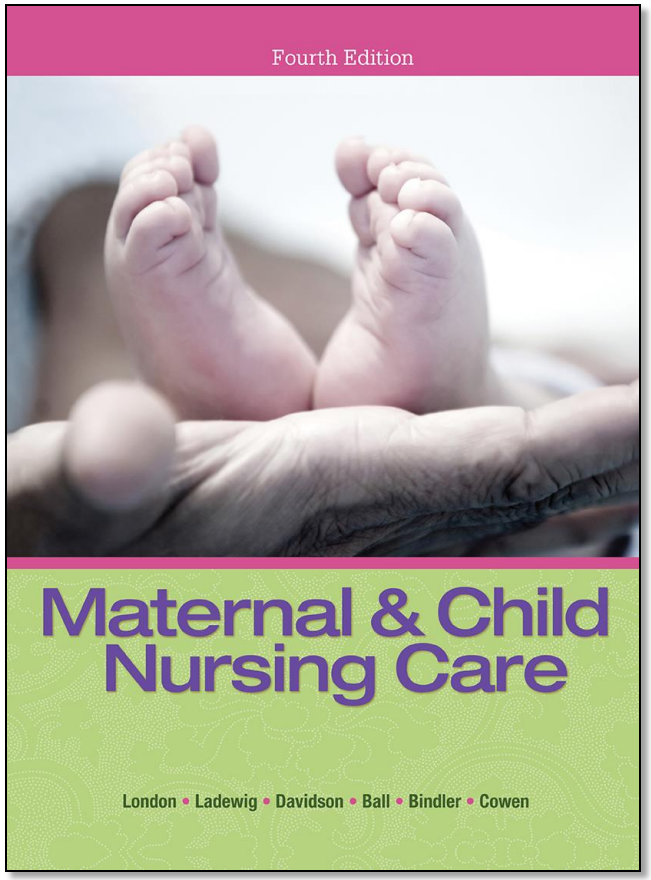
MATERNAL & CHILD NURSING CARE

FOURTH EDITION



CHAPTER 21

Childbirth at Risk: Prelabor Complications

Learning Outcome 21-2

Compare placenta previa and abruptio placenta, including implications for the mother and fetus, and nursing care.

Placenta Previa

Placenta Previa

- Placental implantation in the lower uterine segment
- As lower uterine segment contracts & dilates, placental villi are torn from uterine wall
  - Uterine sinuses exposed at placental site
  - Amount of bleeding may range from scanty to profuse
  - 4/1000 delivery

Placenta Previa: Four Degrees

- Total
- Partial
- Marginal
- Low-lying

Placenta Previa: Risk Factors

- Asian women
- Prior cesarean birth
- High gravidity
- High parity
- Advanced maternal age

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Placenta Previa: Risk Factors

- Previous miscarriage
- Previous induced abortion
- Cigarette smoking
- Male fetus

Placenta Previa – Fetal Prognosis

- Depends on extent of placenta previa
- Profuse bleeding yields fetal compromise & hypoxia
- FHR monitoring is imperative upon maternal admission, particularly if vaginal birth is anticipated, as the presenting fetal part may obstruct the placental or umbilical cord blood flow

Placenta Previa – Indications for Cesarean Birth

- Nonreassuring fetal status
- Diagnosis of complete or partial previa

Placenta Previa – Nursing Assessment

- Maternal assessment for painless, bright-red vaginal bleeding
  - Most accurate diagnostic sign of placenta previa
  - If this sign develops during the last 3 months of pregnancy, placenta previa should always be considered until ruled out by ultrasound examination
- Bleeding usually begins as scant and becomes more profuse

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Placenta Previa – Nursing Assessment

- Anticipate unengaged fetal presenting part
- Transverse lie is common
- Assessment of fetal status
  - FHR - continuous external fetal monitoring
  - Electronic monitor tracing

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Placenta Previa – Nursing Assessment

- Anticipate need for blood transfusion
- Assess maternal vital signs
  - Every 15 minutes if no hemorrhage
  - Every 5 minutes with active hemorrhage
- External tocodynamometer

Placenta Previa – Nursing Care During Active Bleeding

- Assessments and management directed toward physical support

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Placenta Previa – Nursing Care During Active Bleeding

- Address emotional aspects simultaneously
  - Explain assessments and treatment measures
  - Provide time for questions
  - Advocate for the family
  - Stay with the family
  - Therapeutic Touch

Placenta Previa – Newborn Care

- Promote neonatal physiologic adaptation
- Immediate laboratory assessment and monitoring
  - Hemoglobin, cell volume, and erythrocyte count
- Anticipate potential need for oxygen, blood administration, and admission to special care nursery

Figure 21-1 Classification of placenta previa. *A*, Low-lying placental implantation.

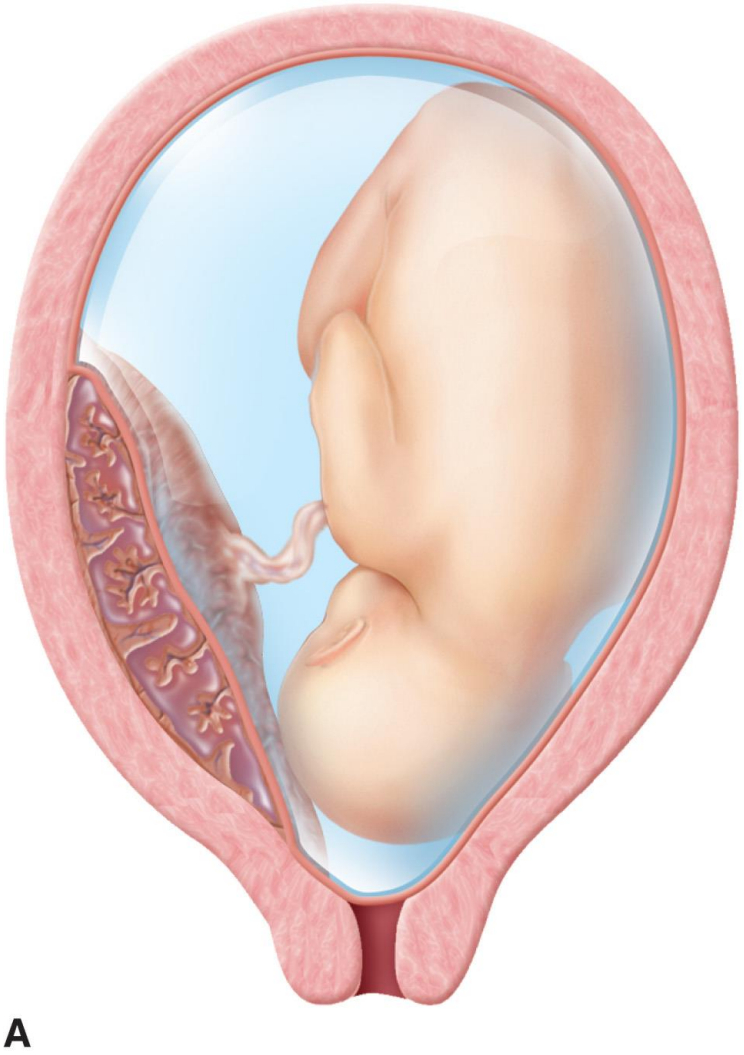


Figure 21-1 (continued) Classification of placenta previa. *B*, Partial placenta previa.

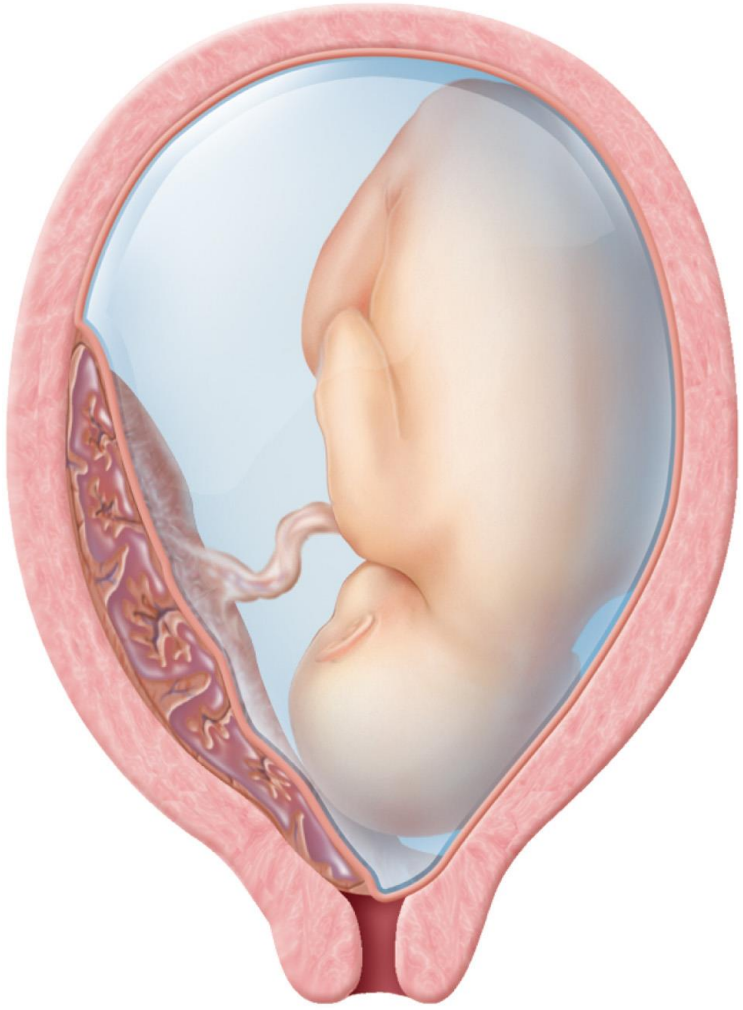
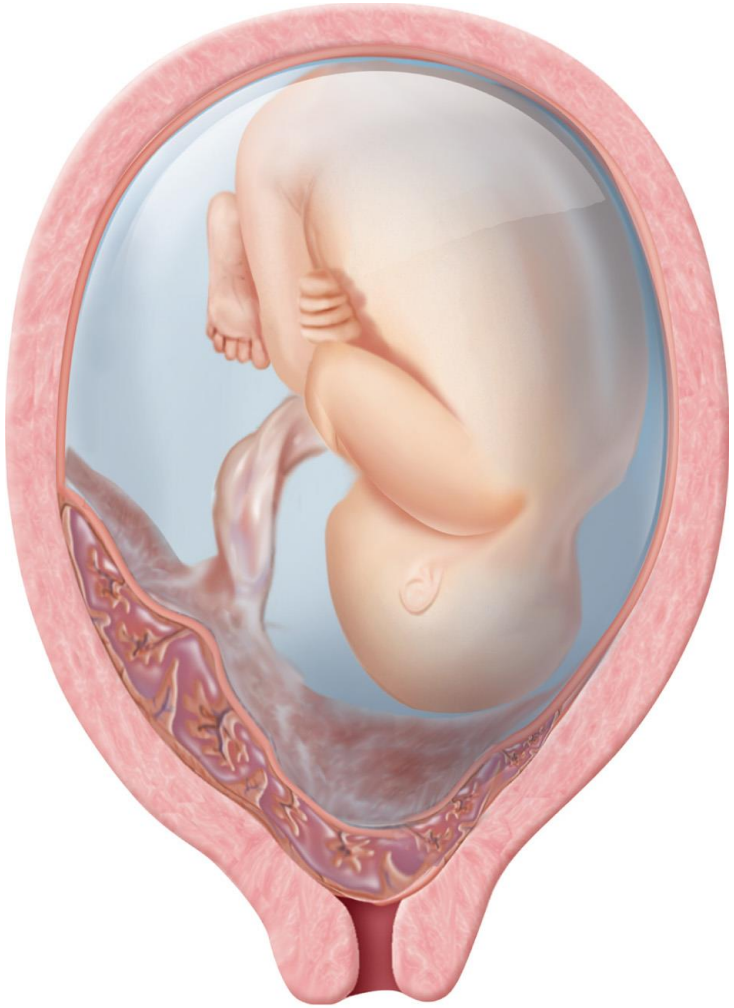


Figure 21-1 (continued) Classification of placenta previa. *C*, Complete placenta previa.



Abruptio Placentae

Abruptio Placentae

- Premature separation of a normally implanted placenta from the uterine wall
- Cause is largely unknown

Abruptio Placentae – Associated Risk Factors

- Increased maternal age
- Increased parity
- Cigarette smoking
- Cocaine abuse
- Trauma
- Maternal hypertension

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Abruptio Placentae – Associated Risk Factors

- Rapid uterine decompression associated with hydramnios and multiple gestation
- Preterm premature rupture of the membranes (PPROM)
- Previous placental abruption
- Uterine malformations or fibroids
- Placental anomalies

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Abruptio Placentae – Associated Risk Factors

- Amniocentesis
- Shortened umbilical cord
- Male sex
- Low socioeconomic status
- Subchorionic hematoma

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Three Types of Placental Separation

- Marginal
  - Blood passes between the fetal membranes and the uterine wall and escapes vaginally
- Central
  - Blood is trapped between the placenta and uterine wall with concealed bleeding

Three Types of Placental Separation

- Complete
  - Total separation and massive bleeding

Figure 21-2 Abruptio placentae. A, Marginal abruption with external hemorrhage.

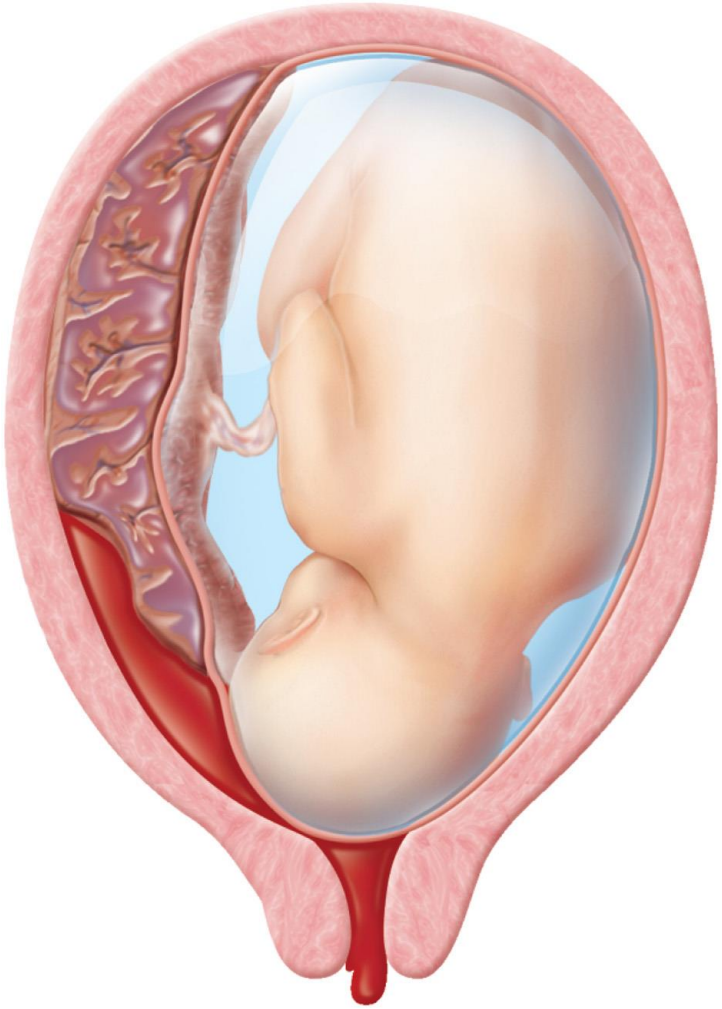
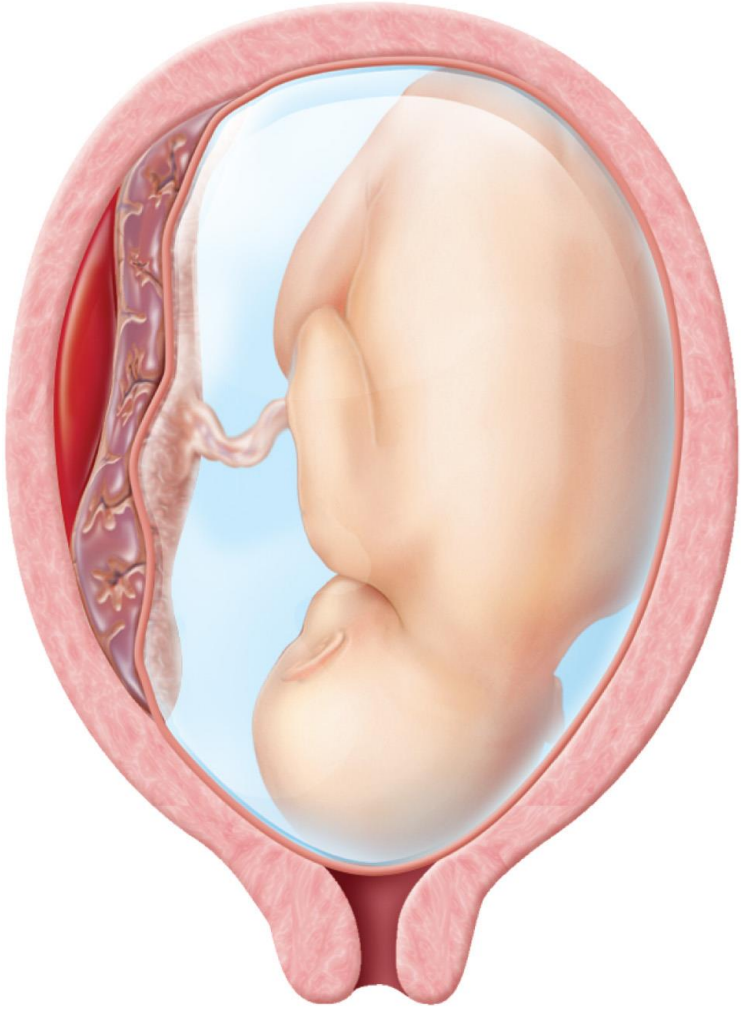
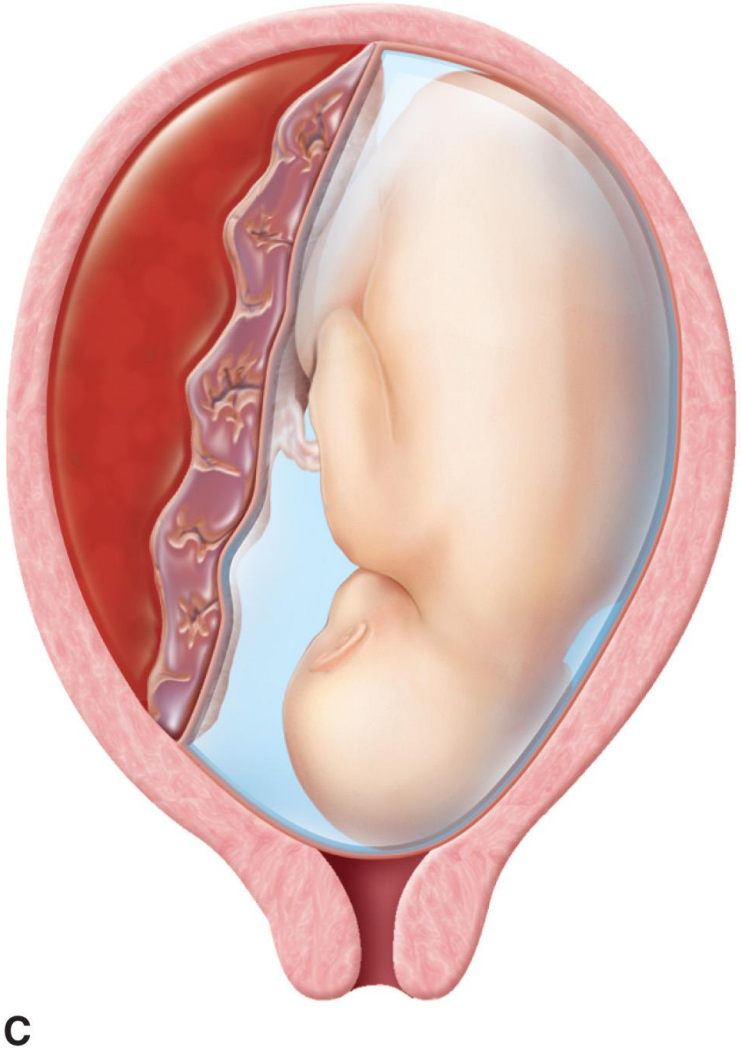


Figure 21-2 (continued) Abruptio placentae. B, Central abruption with concealed hemorrhage.



B

Figure 21-2 (continued) Abruptio placentae. C, Complete separation.



Abruptio Placentae – Implications

- Maternal
  - Risk of hemorrhage, shock, and DIC

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Abruptio Placentae – Implications

- Fetal
  - Neonatal outcomes depend on degree of abruption
  - Low incidence of fetal death
    - Typically depends upon the degree of placental separation
  - Fetal complications include preterm labor, anemia, and hypoxia

Abruptio Placentae – Assessment and Monitoring

- Electronic monitoring of uterine contractions and resting tone between contractions
  - Provides information about the labor pattern and effectiveness of oxytocin induction
- Hourly abdominal girth measurements

Abruptio Placentae – Assessment and Monitoring

- Monitor for DIC
  - Coagulation tests
  - Levels of fibrin-degradation products

Abruptio Placentae – Clinical Therapy

- Immediate priorities are maintaining maternal cardiovascular status and developing a birth plan
- Cesarean birth is often the safest option
- Induction of labor may be indicated

Abruptio Placentae – Decreasing the Risk of DIC

- Type and crossmatch for blood transfusions (at least three units)
- Evaluate clotting mechanism
- Administer intravenous fluids

Abruptio Placentae – Moderate to Severe Separation

- Cesarean birth follows treatment of hypofibrinogenemia
- Vaginal birth impossible with a Couvelaire uterus (bleeding that penetrates into the uterine myometrium forcing its way into the peritoneal cavity)
  - Lack of proper uterine contraction labor
  - Hysterectomy often needed

Abruptio Placentae – Fluid Volume Status

- Hypovolemia associated with severe abruptio placentae is life threatening
  - Requires administration of whole blood
- If fetus is alive but experiencing stress
  - Emergency cesarean is method of choice

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Abruptio Placentae – Fluid Volume Status

- If fetus is stillborn
  - Vaginal birth is preferable if bleeding has stabilized, unless maternal shock from hemorrhage is uncontrollable

Abruptio Placentae – Fluid Volume Status

- Administer intravenous fluids
- Hourly central venous pressure (CVP) monitoring
- Laboratory testing
  - Includes hemoglobin, hematocrit, and coagulation status
- Hematocrit maintained at 30% through administration of packed red blood cells or whole blood

Third-Trimester Bleeding – Overview of Nursing Care

- Frequent monitoring of vital signs
- Assess for signs of shock
- Estimate blood loss
- Monitor FHR
- Electronically monitor contractions

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Third-Trimester Bleeding – Overview of Nursing Care

- Administer blood as needed
- Monitor urine output
- Facilitate and monitor diagnostic tests and results
- Support and educate the woman and her family