Placental Abruption

Shirin Hasanpoor
Midwifery M.Sc
Tabriz University of Medical Sciences

Causes of Late Pregnancy Bleeding

- Placenta Previa
- Abruption
- Ruptured vasa previa
- Uterine scar disruption
- Cervical polyp
- Bloody show
- Cervicitis or cervical ectropion
- Vaginal trauma
- Cervical cancer

Life-Threatening

Placental Abruption (Abruptio placentae)

- **Placental Abruption is the separation of the placenta from the uterine wall before delivery**
  - **Marginal separation**
  - **Partial separation**
  - **Complete separation with concealed hemorrhage**

Sher's Classification - Abruption

- **Grade I** Mild, often identified at delivery with retroplacental clot
- **Grade II** Symptomatic, tender abdomen and live fetus
- **GradeIII** Severe, with fetal demise
  - III A - without coagulopathy (2/3)
  - III B - with coagulopathy (1/3)

Sher G, Statland BE. Abruptio placentae with coagulopathy: a rational basis for management. *Clin Obstet Gyneco*l 1985;28(1):15-23.

Placental Abruption

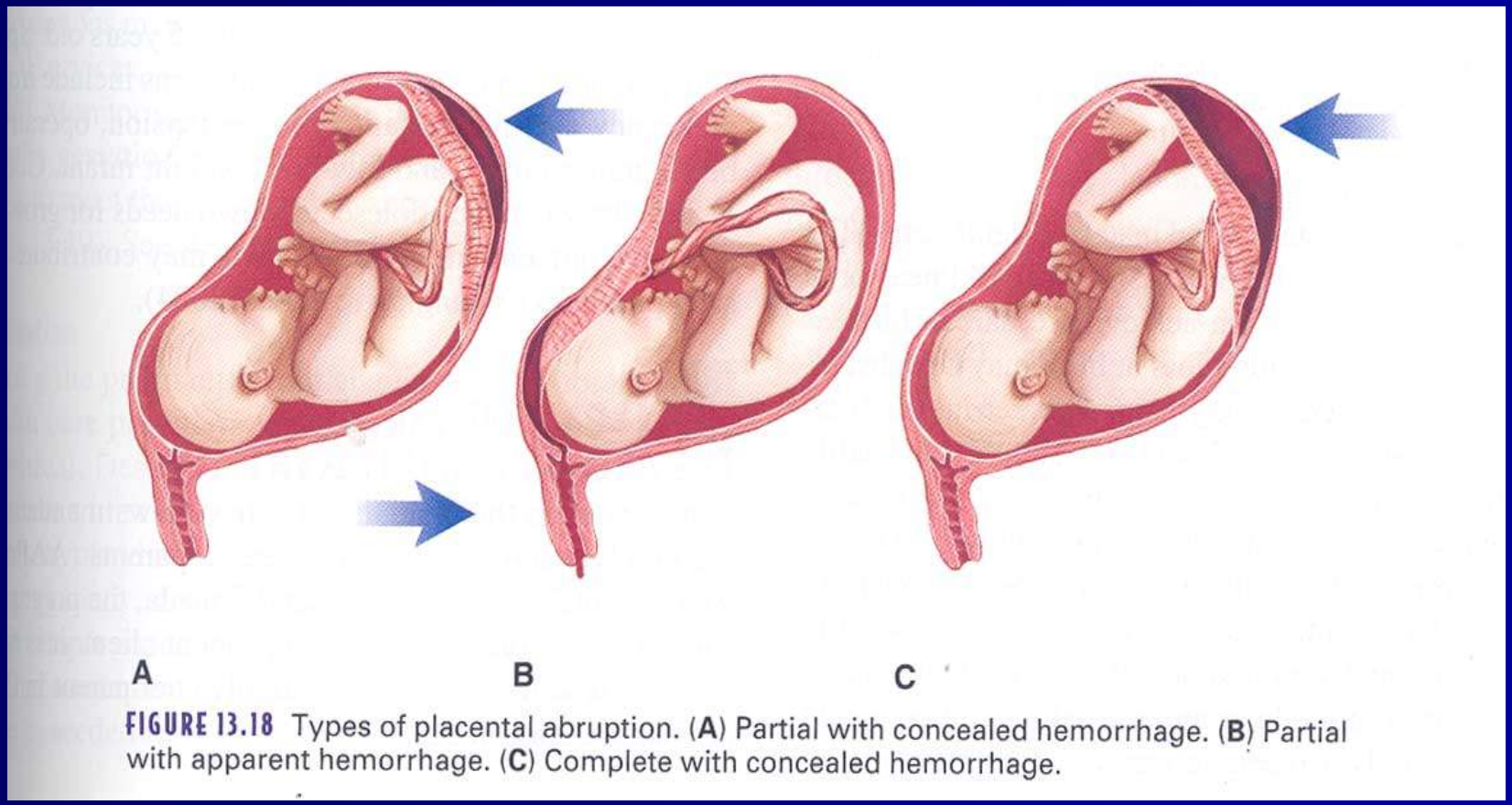


FIGURE 13.18 Types of placental abruption. (**A**) Partial with concealed hemorrhage. (**B**) Partial with apparent hemorrhage. (**C**) Complete with concealed hemorrhage.

Incidence of Abruption

- Most common cause of late pregnancy bleeding
- Occurs in 1 in 200 births
- 50% occur before 36 weeks
- 80% occur before the onset of labor
- Increased risk of maternal/fetal death
  - 10-30% neonatal mortality associated

Risk Factors of Abruption

- Chronic hypertension
- Multiparity
- Preeclampsia
- Advanced maternal age
- Previous abruption
- Short umbilical cord
- Sudden decompression of an overdistended uterus
- Thrombophilias
- Tobacco, cocaine, or methamphetamine use
- Trauma
- Unexplained elevated maternal alpha fetoprotein level
- Uterine fibroids

Presentation

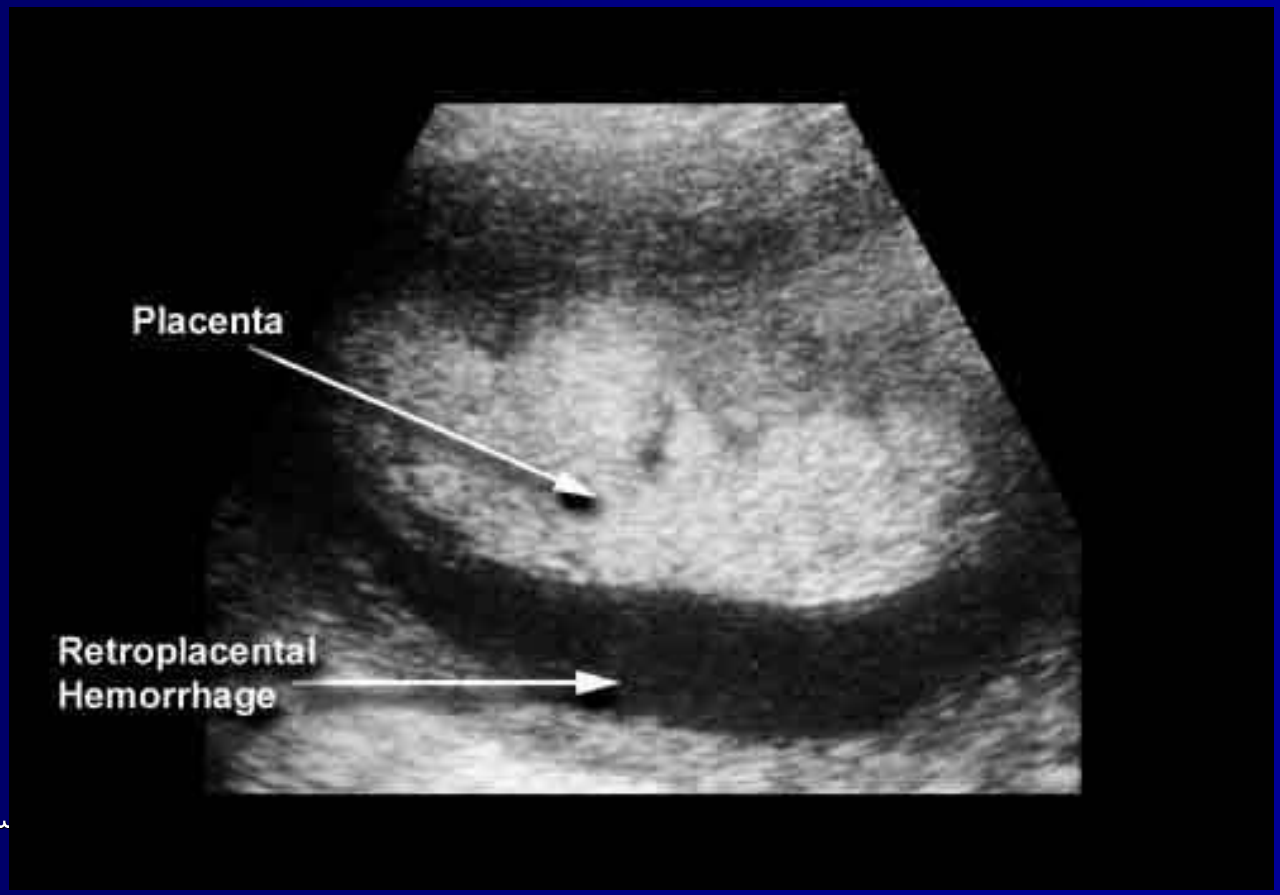
- Women often present with the following:
  - Painful vaginal bleeding
    - Bleeding may not be visible
  - Abdominal or back pain and uterine tenderness
  - Fetal distress
  - Abnormal uterine contractions (hypertonic, high frequency)
  - Idiopathic premature labor
  - Fetal death
- DIC may result from the release of thromboplastin into the maternal circulation with placental separation

Diagnosis

- Any pregnant woman who presents with significant vaginal bleeding needs evaluation
  - History and Physical
- Never do digital exam without knowing placental placement!
- Ultrasound will show abruption in 25% of cases
  - Often hard to distinguish clots on U/S
- Diagnosis is based on clinical picture once other causes have been excluded
  - May not have definite diagnosis until clot or indentation is seen on placenta after delivery

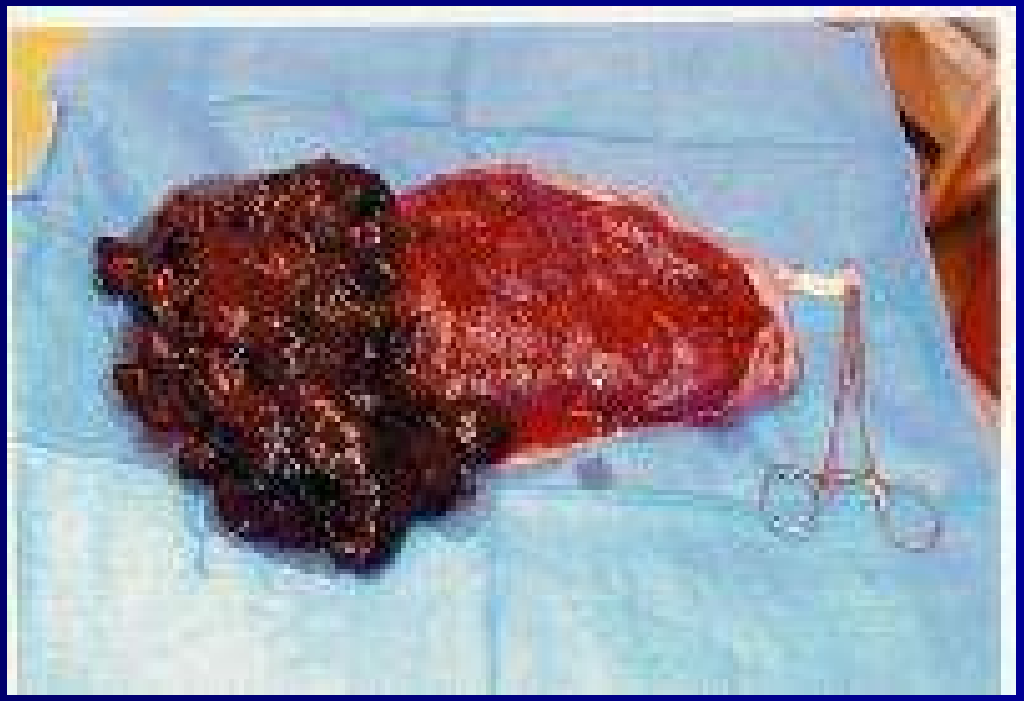
Diagnosis

And more….



Diagnosis

Placental abruption after delivery



Complications

- DIC
- Postpartum haemorrhage
- Renal failure
- Sheehan syndrome
- Maternal mortality(1%)

Treatment – Grade II Abruption

- Assess fetal and maternal stability
- Amniotomy
- IUPC to detect elevated uterine tone
- Expeditious operative or vaginal delivery
- Maintain urine output > 30 cc/hr, hematocrit > 30%
- Prepare for neonatal resuscitation

Kayani SI, Walkinshaw SA, Preston C. Pregnancy outcome in severe placental abruption. BJOG 2003;110:679-683

Treatment – Grade III Abruption

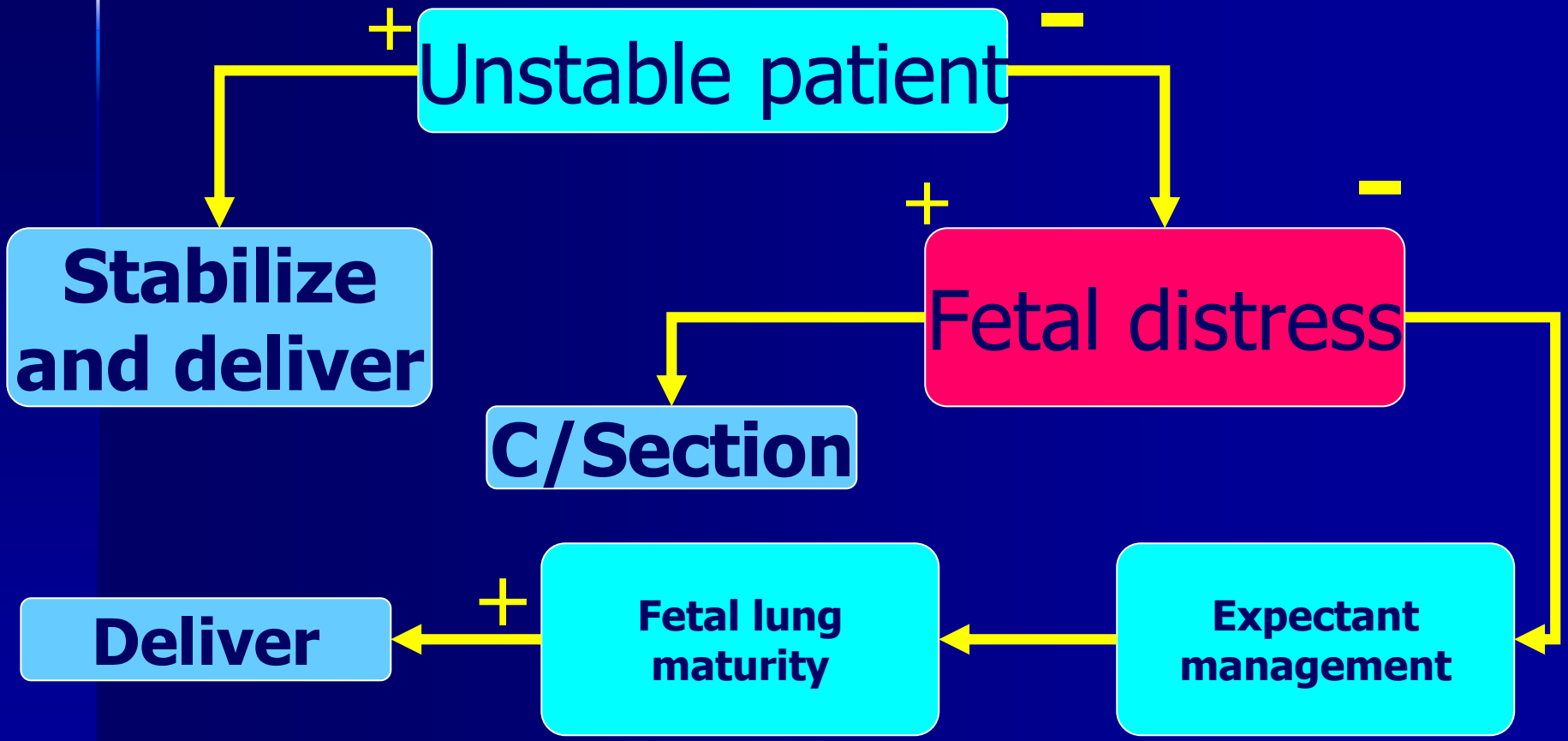
- Assess mother for hemodynamic and coagulation status
- Vigorous replacement of fluid and blood products
- Vaginal delivery preferred, unless severe hemorrhage

Coagulopathy with Abruption

- Occurs in 1/3 of Grade III abruption
- Usually not seen if live fetus
- Etiologies: consumption, DIC
- Administer platelets, FFP

Managemen
rit

Abruption in a pregnancy of viable gestational age



Questions?


THE END