Complications of Pregnancy

Hyperemesis Gravidarum

Intractable nausea and vomiting that persists beyond the first trimester and causes disturbances in nutrition, electrolytes, and fluid balance

Assessment

- Nausea most pronounced on arising
- Persistent vomiting
- Weight loss
- Signs of dehydration
- Electrolyte imbalances
- Ketonuria
- Increased hematocrit levels

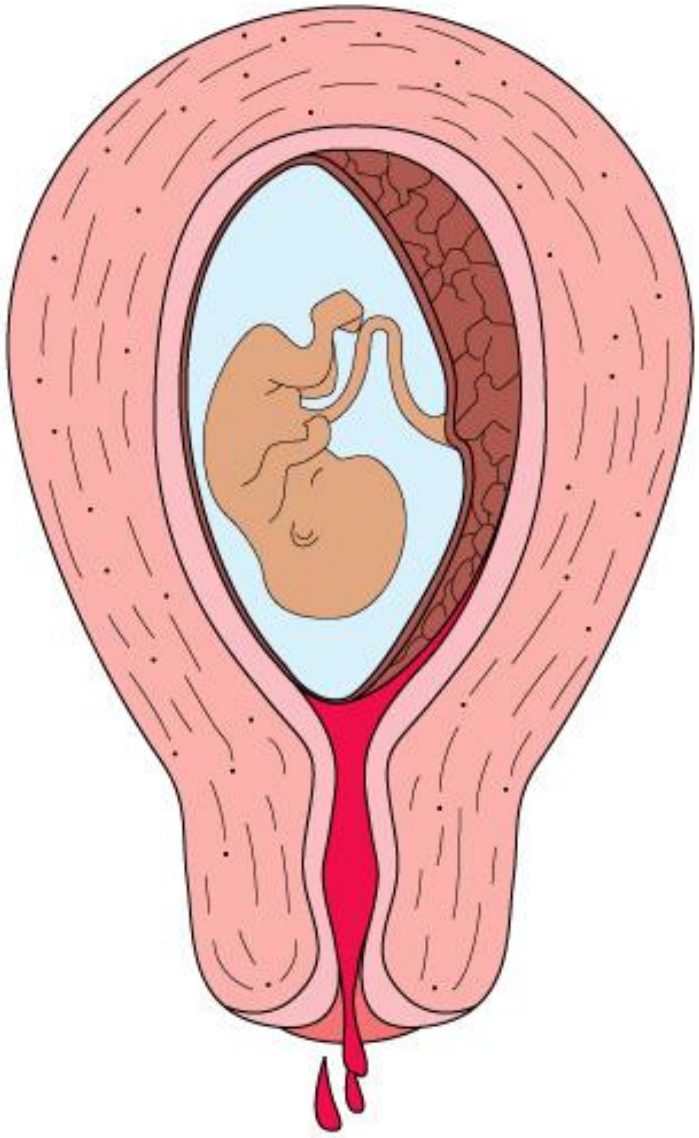
Nursing Interventions

- Monitor vital signs
- Monitor FHR, fetal activity and fetal growth
- Monitor for dehydration and electrolyte imbalance
- Daily weight, I&O, calorie count
- Monitor urine for ketones
- Administer IV fluids, antiemetics

Bleeding Disorders of Early Pregnancy

- **Spontaneous abortion**
- **Ectopic pregnancy**
- **Hydatidiform mole**

Threatened Abortion



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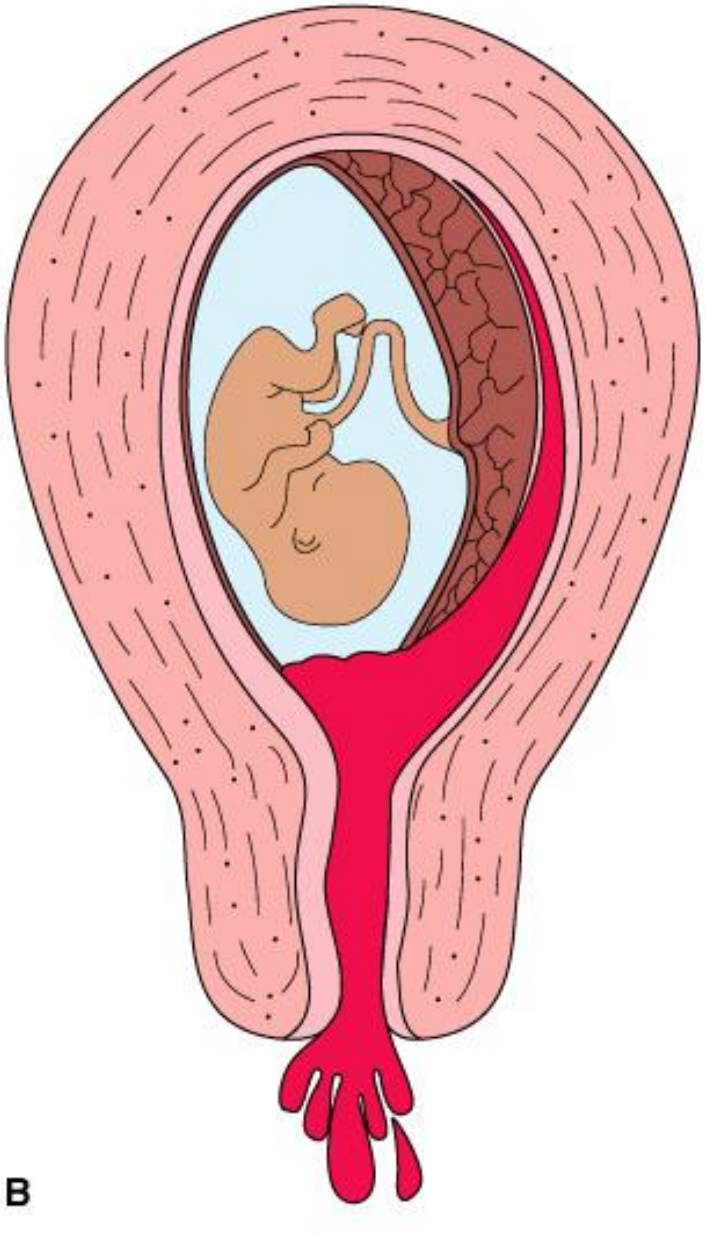
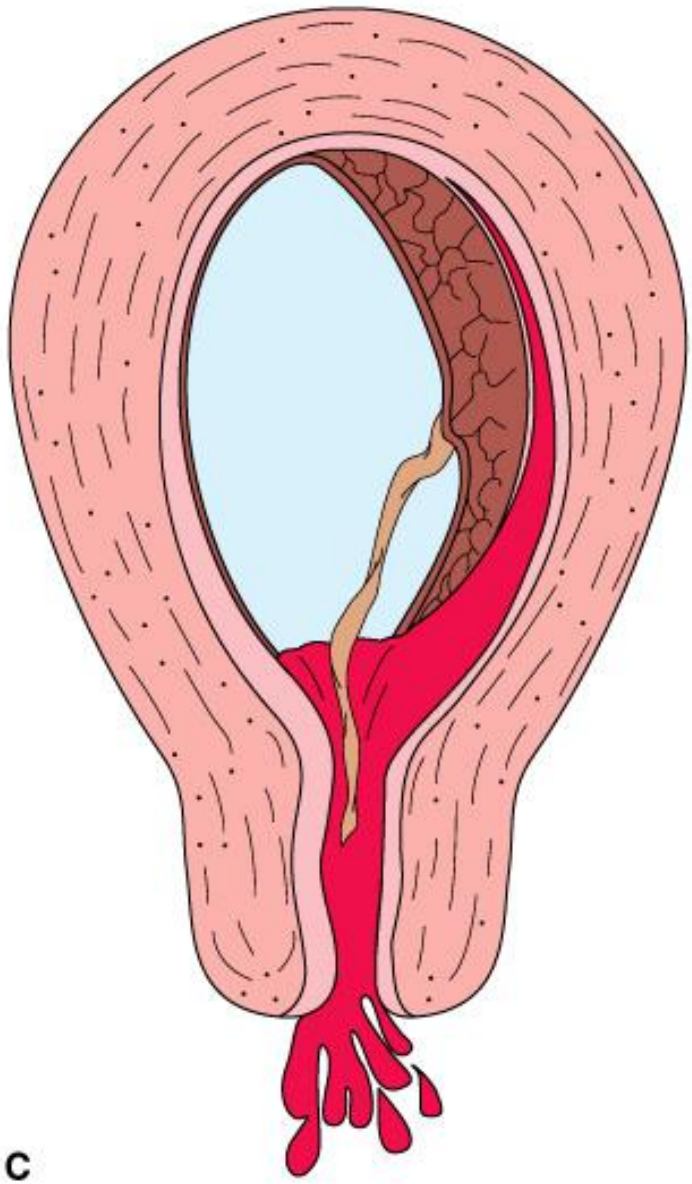
Imminent Abortion



Incomplete Abortion

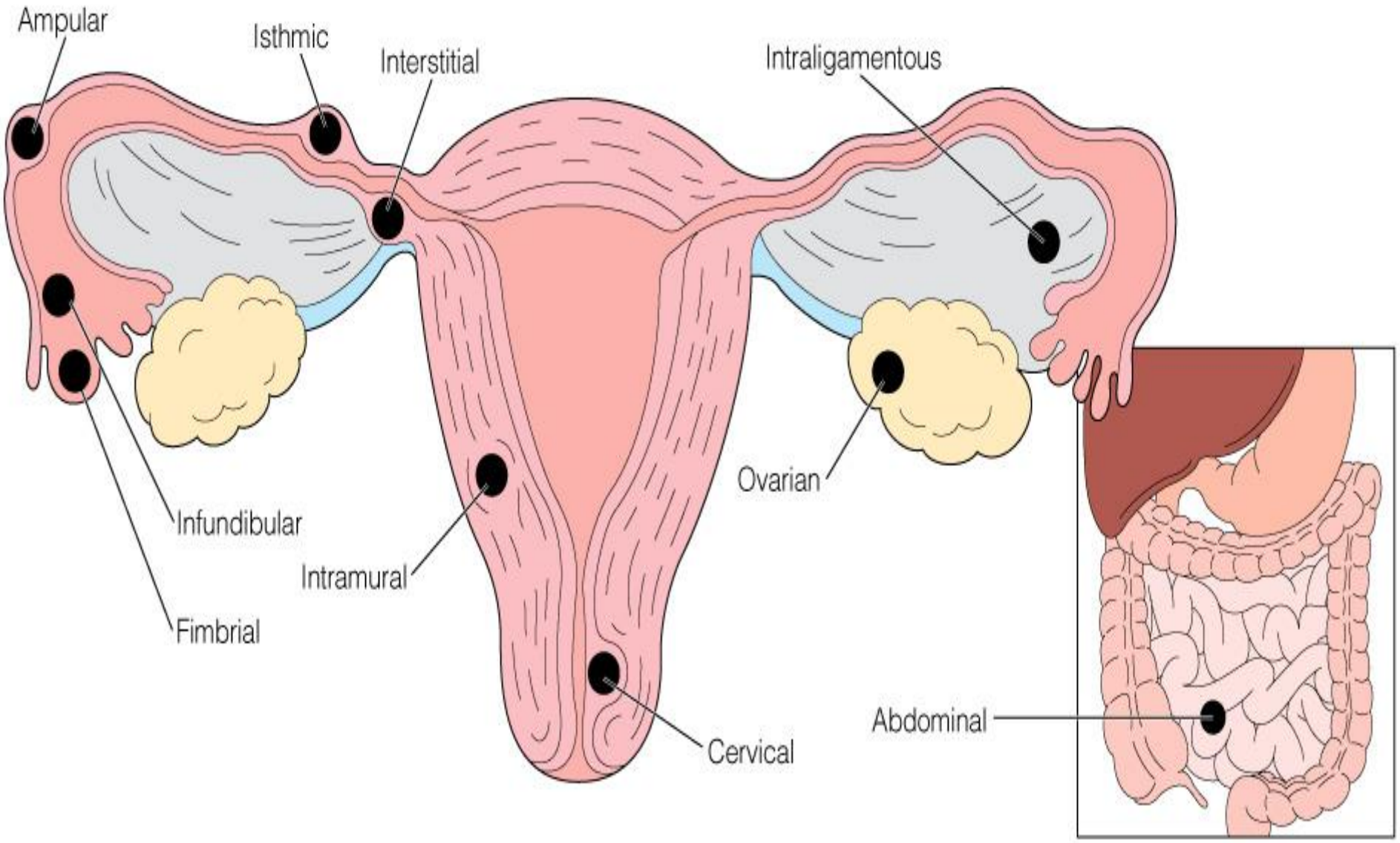


Nursing Interventions

- Save perineal pads / tissue
- Emotional support
- Observe for shock
- Bed rest / diversional activity
- RhoGAM
- Possible surgery
- Medication / Blood

Ectopic pregnancy is often difficult to diagnose because its symptoms are similar to those of abdominal conditions. Identify at least five signs or symptoms of ectopic pregnancy and briefly explain why each occurs.

Ectopic Sites



Ectopic Pregnancy

- Fertilized ovum implants outside the uterus
- Symptoms at 6 to 12 weeks of gestation
- Severe unilateral pelvic-abdominal pain
- Pain may refer to shoulder
- Tender abdominal mass
- Nausea, faintness
- Bleeding – frank or occult

Nursing Interventions

- Monitor vital signs
- Administer intravenous fluids
- Provide oxygen when needed
- Medicate for pain
- Assess lab results
- Prepare for possible surgery
- Provide emotional support

Preeclampsia

- Is a disorder of widespread vascular endothelial malfunction and vasospasm that occurs after 20 weeks' gestation.

Causes

- Exact Pathopysiology unknown
- Possible causes-
  - dysfunction of the uteroplacental bed leading to vasoconstriction, platelet aggregation and hypercoagulability
  - vasospasm, microthrombi, hypertension etc

Sign & Symptom

- *Resp*: Plum. Edema, cyanosis.
- *Cardiac*: Congestive Cardiac Failure (CCF).
- *Renal*: Proteinuria, ↑ Serum creatinine, oliguria.
- *Hepatic*: ↑ LFTs, RUQ / epigastric pain.
- *Neurologic*: visual disturbance, headache and convulsions.
- *GI*: severe nausea / vomiting.
- *Hematologic*: thrombocytopenia, microangiopathic hemolysis.

Hypertensive Disease Associated with Pregnancy

Gestational Hypertension

- BP of 140/90 mm Hg or greater for the first time during pregnancy
- No proteinuria
- BP returns to normal less than 12 weeks' postpartum
- Final diagnosis made only postpartum

Hypertensive Disease Associated with Pregnancy

- **Preeclampsia**
  - Criteria
    - Develops after 20 weeks
    - Blood pressure elevated on two occasions at least 6 hours apart
    - Associated with proteinuria and edema

Preeclampsia vs. Severe Preeclampsia

Criteria for Preeclampsia

- Previously normotensive woman
- ≥ 140 mmHg systolic
- ≥ 90 mmHg diastolic
- Proteinuria ≥ 300 mg in 24 hour collection
- Nondependent edema

Criteria for Severe Preclampsia

- BP ≥ 160 systolic or ≥110 diastolic
- ≥ 5 g of protein in 24 hour urine
- Oliguria < 500 mL in 24 hours
- Cerebral or visual distrubances (headache)
- Pulmonary edema or cyanosis
- Epigastric or RUQ pain
- Evidence of hepatic dysfunction
- Thrombocytopenia

Hypertensive Disease Associated with Pregnancy

Eclampsia

- Diagnosis of preeclampsia
- Presence of convulsions not explained by a neurologic disorder
  - Grand mal seizure activity
- Occurs in 0.5 to 4% or patients with preeclampsia

Hypertensive Disease Associated with Pregnancy

- **HELLP Syndrome**
  - A distinct clinical entity with:
    - **H**emolysis, **E**levated **L**iver enzymes, **L**ow **P**latelets
  - Occurs in 4 to 12 % of patients with severe preeclampsia
    - Thrombocytopenia
    - Hepatocellular dysfunction

Risk Factors for Preeclampsia

- Multi fetal gestations
- Maternal age over 35
- Preeclampsia in a previous pregnancy
- Chronic hypertension
- Pregestational diabetes
- Vascular and connective tissue disorders
- Nephropathy
- Obesity

Management - Pre-eclampsia

- THE ONLY EFFECTIVE Rx IS DELIVERY
- May be restricted by neonatal survival
- Bed rest:- ? improves renal & uteroplacental flow
- Valium/MgSO4:- only to reduce risk of convulsion in presence of hyper-reflexia & cerebral excitability
- Antihypertensives:-

– alpha/Beta-blockers: Labetolol (Trandate) 100-200mg
– Hydralazine 20-40 mg qid
– Nifedipine 10-20 mg
– Diuretics - NO PLACE [unless heart failure] SINCE PREECLAMPSIA S ASSOCIATED WITH HYPOVOLAEMIA

Seizure Prophylaxis

- Magnesium sulfate
- 4-6 g bolus
- 1-2 g/hour
- Monitor urine output, With renal dysfunction, may require a lower dose

Magnesium Sulfate

- Is not a hypotensive agent
- Works as a centrally acting anticonvulsant
- Also blocks neuromuscular conduction
- Serum levels: 6-8 mg/dL

Alternate Anticonvulsants

- Have not been shown to be as efficacious as magnesium sulfate and may result in sedation that makes evaluation of the patient more difficult
  - Diazepam 5-10 mg IV
  - Pentobarbital 125 mg IV

NURSING MANAGEMENT

- Monitor for, and promote the resolution of, complications.
  - Monitor vital signs and FHR.
  - Minimize external stimuli; promote rest and relaxation
  - Measure and record urine output, protein level, and specific gravity.
  - Assess for edema of face, arms, hands, legs, ankles, and feet. Also assess for pulmonary edema.
  - Weigh the client daily.
  - Assess deep tendon reflexes every 4 hours.
  - Assess for placental separation, headache and visual disturbance, epigastric pain, and altered level of consciousness.

Nursing Diagnosis and Nursing Interventions for Preeclampsia

Nursing Diagnosis for Preeclampsia

1. *High risk of seizures in pregnant women associated with decreased organ function (vasospasm and increased blood pressure).*
2. *High risk of fetal distress related to changes in the placenta*
3. *Impaired sense of comfort (pain) related to uterine contractions.*

1. high risk of seizures in pregnant women related to decreased organ function (vasospasm and increased blood pressure).

1. Monitor blood pressure every 4 hours

   Rational: The pressure over 110 mmHg diastole and systole 160 or more an indication of PIH.

2. Record the patient's level of consciousness

   Rational: The decline of consciousness as an indication of decreased cerebral blood flow.

3. Assess signs of eclampsia (hyper active, the patellar reflexes, decreased pulse and respiration, epigastric pain and oliguria)

   Rational: The symptoms are a manifestation of changes in the brain, kidney, heart and lung that precedes seizure status.

4. Monitor for signs and symptoms of labor or uterine contractions.

   Rationale: Seizures will increase the sensitivity of the uterus which will allow the delivery.

5. Collaboration with the medical team in the provision of anti-hypertension

   Rationale: Anti-hypertension to lower blood pressure.

2. High risk of fetal distress related to changes in the placenta

intervention :

1. Monitor fetal heart rate as indicated
   Rationale: Increased fetal heart rate as an indication of hipoxia, premature.
2. Review on fetal growth
   Rational: Decrease in placental function may be caused by hypertension, causing IUGR.
3. Explain the signs of abrotio placenta (abdominal pain, bleeding, uterine tension, decreased fetal activity)
   Rational: Pregnant women may know the signs and symptoms of placenta. Pregnant women can learn from hypoxia in the fetus.
4. Collaboration with the medical ultrasound and NST.
   Rational: ultrasound and NST to a known state / welfare of the fetus.