

## **OB at Risk - Complications of Pregnancy**

### **Spontaneous Abortion**

**Threatened abortion** – cervix closed; bleeding, cramping, backache; pregnancy may continue, but limit activities for 24 – 48 hours

**Imminent abortion** – cervix dilates; severe bleeding, cramping; lose fetus

**Complete abortion** - all products of conception lost within 24 – 48 hours

**Incomplete abortion** - all products of conception are not lost; may need D & C

**Missed abortion** – fetus dies but is not expelled; may need a D & C

### **Ectopic Pregnancy**

Site of implantation is outside uterus. Tubal pregnancy is when implants in fallopian tube. May also implant in abdominal cavity, on ovaries, or on cervix.

Mom with history of PID or tubal surgery is at increased risk.

#### **Characteristics:**

Spotting after one or two missed periods (8 – 12 weeks)

Sharp pain in lower left or right quadrant, radiating to shoulder

Concealed hemorrhage may lead to shock

Confirmed by ultrasound

Must remove fetus surgically

#### **Nursing concerns:**

Assess for hypovolemic shock

Maintain hemostasis

Provide emotional support

### **Placenta Previa**

Placenta implants on the lower uterine segment → may lead to hemorrhage or decreased placental perfusion

#### **Characteristics:**

Presence of bright red blood without pain

Confirmed by ultrasound

Soft uterus in late pregnancy

Vital signs may indicate shock

#### **Nursing concerns:**

Assess for hypovolemic shock

Maintain hemostasis

Monitor fetal heart rate at all times

Provide emotional support

### **Abruptio Placenta**

Partial or complete separation of the placenta from the uterine wall segment → may lead to hemorrhage &/or decrease of placental perfusion

If placenta separates at edge, see blood; if separates in middle, so sealed, don't see blood

Mom with history of abruptio, cocaine use, essential hypertension, or PID has increased risk

**Characteristics:**

- Presence of dark red blood with pain OR concealed bleeding causes pain without bleeding
- Increased tonicity of uterus & abdomen
- Fetal hyperactivity, then cessation of fetal movement
- Vital signs may indicate shock

**Nursing concerns:**

- Assess for shock
- Maintain hemostasis
- Hemorrhage predisposes client to hypofibrinogenemia → DIC
- Monitor fetal heart rate at all times
- Prepare for Cesarean birth if necessary
- Provide emotional support
- Risk for death of fetus &/or mom

**Incompetent Cervix**

- Cervix dilates prematurely, allowing passage of part or the entire fetus.
- Treat with cerclage that is removed when mom goes into labor

**Pregnancy-Induced Hypertension (PIH)**

- Increase in BP during pregnancy

**Gestational Hypertension:**

- Resolves within 6 weeks & there is no proteinuria & no edema

**Risk factors:**

- History of diabetes mellitus, chronic hypertension, or severe nutritional deficiencies
- Young (<17 years old), older (>35 years old)
- Multiparous

**Pre-eclampsia - Mild:**

- Increase in BP during pregnancy with onset after 20<sup>th</sup> week of pregnancy

**Risk factors:**

- Same as for gestational hypertension

**Characteristics:**

- BP over 140/90 OR increase of 30 mm systolic, 15 mm diastolic, over pre-pregnancy BP
- Proteinuria – 1-2+
- Edema of face & hands
- Weight gain of: >2 lb/wk in 2<sup>nd</sup> trimester & 1 lb/wk in 3<sup>rd</sup> trimester = mild

**Nursing concerns:**

- High protein diet
- Elevate feet
- Rest in side-lying position

**Pre-eclampsia - Severe:****Characteristics:**

- BP over 160/110
- Proteinuria –3-4+
- Edema of face & hands
- Weight gain of: >2 lb/wk in 2<sup>nd</sup> trimester & 1 lb/wk in 3<sup>rd</sup> trimester = mild

**Nursing concerns:**

- High protein diet
- Elevate feet
- Complete bed rest in side-lying position
- Antihypertensives
- IV MgSO<sub>4</sub> to prevent seizures with calcium gluconate available as antidote
- May induce labor or deliver by Cesarean

**Eclampsia**

Cerebral edema → seizure with hypertension, proteinuria, & edema

May lead to death

Same risk factors as for pre-eclampsia

**Characteristics:**

BP 160/110

Extensive edema in face, hands, & legs

Proteinuria 3 – 4+

Persistent headache / blurred vision

Epigastric pain

**Nursing concerns:**

- Complete bed rest
- Seizure precautions
- IV MgSO<sub>4</sub> to prevent seizures with calcium gluconate available as antidote
  - Monitor for magnesium toxicity (eg: loss of patellar reflexes, depressed respirations)
- Antihypertensives
- May induce labor or deliver by Cesarean

**The Cardiac Pregnant Woman****Assess for signs of CHF:**

- Edema
- Respiratory distress (dyspnea, crackles, cough, complaint of SOB)
- Tachycardia
- Pattern of weight gain

**Nursing concerns:**

- Watch for sudden tachycardia or bradycardia
- Low Na<sup>+</sup> diet
- May use forceps to assist in birth to prevent pushing → vagal down
- Administer prophylactic antibiotics
- Early ambulation / use of TED hose to aid venous return

## **Gestational Diabetes (Type 3)**

Temporary condition that disappears with delivery of baby, but indicates that woman is at higher risk for developing Type II diabetes later.

### **Pathophysiology:**

Estrogen, progesterone, and cortisol raise maternal resistance to insulin. If the pancreas can't increase insulin production → maternal blood glucose levels elevate → go to fetus → increase fetal insulin production → acts like growth hormone → macrosomia but immature  
24 hours post-partum, blood glucose levels will normalize again.

### **Tests for – Glucose Tolerance Tests:**

- 1-hour glucose tolerance test to screen all pregnant women at 24 – 28 weeks. Fasting 8 hr before test, then 50g glucose at start of test.
- 3 hour glucose tolerance test if results from 1 hour test > 140 mg/dl

### **Nursing concerns:**

Assess for signs/symptoms of hyperglycemia:

- Polyuria
- Polydipsia
- Polyphagia
- Weight loss

Monitor maternal blood glucose levels closely, with insulin coverage as necessary

Glycosylated hemoglobin test – tests past 4 – 12 weeks of blood glucose levels

Diet:

1800 – 2200 calories divided into 3 meals + 3 snacks. (Not < 1800 cal even if overweight)

Last snack before bed of protein & complex carbohydrates so decrease risk of hypoglycemia at night

Decrease amount of saturated fats & cholesterol; increase dietary fiber

There is a higher incidence of fetal anomalies and neonatal hypoglycemia

Test for alpha fetoprotein at 15 – 17 weeks

Ultrasound at 18 weeks to look for gross abnormalities

Test placental functioning with non-stress test once a week as there is increased risk of uteroplacental insufficiency

L/S ratio – check at 36 weeks - needs to be 3:1

Risk of rebound neonatal hypoglycemia minimized if good maternal blood glucose control during labor