# Obstetrical and Gynecological Conditions

### Aliases

None noted

### Patient Care Goals

1. Recognize serious conditions associated with hemorrhage during pregnancy even when hemorrhage or pregnancy is not apparent (e.g. ectopic pregnancy, abruptio placenta, placenta previa)
2. Provide adequate resuscitation for hypovolemia

### Patient Presentation

### Inclusion Criteria

1. Female patient with vaginal bleeding in any trimester
2. Female patient with pelvic pain or possible ectopic pregnancy
3. Maternal age at pregnancy may range from 10 to 60 years of age

### Exclusion Criteria

1. Childbirth and active labor [see Childbirth guideline]
2. Post-partum hemorrhage [see Childbirth guideline]

## Differential Diagnosis

1. Abruptio placenta: Occurs in third trimester of pregnancy; placenta prematurely separates from the uterus causing intrauterine bleeding
    a. Lower abdominal pain, uterine rigidity (often not present until abruption is advanced).
    b. Vaginal bleeding – this symptom may not occur in cases of concealed abruption.
    c. Clinical index of suspicion for abruption (history of trauma, maternal hypertension, maternal drug use especially cocaine).
    d. Shock, with minimal or no vaginal bleeding.
2. Placenta previa: placenta covers part or all of the cervical opening
    a. Generally, late second or third trimester
    b. Painless vaginal bleeding, unless in active labor
    c. For management during active labor [See Childbirth guideline]
3. Ectopic pregnancy (ruptured)
    a. First trimester
    b. Abdominal/pelvic pain with or without minimal bleeding.
    c. Shock is possible even with minimal or no vaginal bleeding

4. Spontaneous abortion (miscarriage)
    a. Generally first trimester
    b. Intermittent pelvic pain (uterine contractions) with vaginal bleeding/passage of clots or tissue

### Patient Management

### Assessment

1. Obtain history
    a. Obstetrical history [see Childbirth guideline]
    b. Abdominal pain – onset, duration, quality, radiation, provoking or relieving factors
    c. Vaginal bleeding – onset, duration, quantity (pads saturated)
    d. Syncope/lightheadedness
    e. Nausea/vomiting
    f. Fever or history of recent fever

2. Monitoring
    a. Monitor ECG if history of syncope or lightheadedness
    b. Monitor pulse oximetry if signs of hypotension or respiratory symptoms
3. Secondary survey pertinent to obstetric issues
    a. Constitutional: vital signs, orthostatic vital signs, skin color
    b. Abdomen: distention, tenderness, peritoneal signs
    c. Genitourinary: visible bleeding
    d. Neurologic: mental status

**Treatment and Interventions**

1. If signs of shock or orthostasis:
    a. Position patient supine and keep patient warm
    b. Consider isotonic IV/IO fluid bolus 20 ml/kg (normal saline ***[AEMT]*** or lactated Ringer's ***[AEMT]***)
    c. Reassess vital signs and response to fluid resuscitation
    d. See Shock Protocol and Blood Administration Protocols
2. Disposition - transport to closest appropriate receiving facility– notify en route if possible so the receiving team may prepare.

**Patient Safety Considerations**

1. Patients in third trimester of pregnancy should be transported on left side or with uterus manually displaced to left if hypotensive
2. Do not place hand/fingers into vagina of bleeding patient except in cases of prolapsed cord or breech birth that is not progressing

**Notes and Educational Pearls Key Considerations**

Syncope can be a presenting symptom of intraabdominal hemorrhage from ectopic pregnancy or antepartum hemorrhage from spontaneous abortion, placental abruption, or placenta previa

**Pertinent Assessment Findings**

1. Vital signs to assess for signs of shock (e.g. tachycardia, hypotension)
2. Abdominal exam (e.g. distension, rigidity, guarding)
3. If pregnant, evaluate fundal height

**Quality Improvement**

**Associated NEMSIS Protocol(s) (eProtocol.01)**

- 9914159 – OB/GYN-Gynecological Emergencies
- 9914161 – OB/GYN-Pregnancy Related Disorders

**Key Documentation Elements**

- Document full vital signs and physical exam findings.

**Performance Measures**

- Patients with signs of hypoperfusion or shock should not be ambulated to stretcher
- If available, IV should be initiated on patients with signs of hypoperfusion or shock
- Recognition and appropriate treatment of shock

**References**

1. Coppola PT, Coppola M. Vaginal bleeding in the first 20 weeks of pregnancy. *Emerg Med Clin N Am.* 2003;21(3):667-77.
2. Della-Giustina D, Denny M. Ectopic Pregnancy. *Emerg Med Clin N Am.* 2003;21(3):565- 84.
3. WHO, United Nations Population Fund, UNICEF. *Pregnancy, Childbirth, Postpartum and*

*Newborn Care: A guide for essential practice (3rd edition).* Geneva, Switzeralnd: WHO Press; 2015.