



# O&G

**Single Choice Questions (SCQ) and Extended Match Questions (EMQ)**

**Emergency Medicine Fellowship Program**



## O&G MCQs

1. Which is not required for the diagnosis of pregnancy induced hypertension?

- a) systolic BP rise of > 30mmHg above pre pregnancy level
- b) diastolic BP rise of > 15mmHg above pre pregnancy level
- c) an absolute BP of >140/90
- d) occur after the 20th week of gestation
- e) proteinuria

2. Which is not a risk factor for preeclampsia?

- a) molar pregnancy
- b) multigravida
- c) age < 20 years
- d) multiple pregnancy
- e) family history

3. Which statement is not true with regards to preeclampsia?

- a) it is due to a state of fluid overload
- b) the oedema must be generalized
- c) the proteinuria often occurs after the odema and hypertension
- d) if left untreated it can progress to eclampsia and the HELLP syndrome
- e) it is characterized by ischemia and thrombosis of end organs

4. Which is not accurate with regard to management of Eclampsia?

- a) seizures are usually self-terminating if left untreated but will recur
- b) magnesium sulphate 4gm should be given over 15 minutes for seizure control, then infused at 1gm per hour
- c) the desired BP is a diastolic BP of 90mmHg
- d) magnesium sulphate does not lower BP
- e) hydralazine is the agent of choice to lower BP, 5mg every 20 minutes

5. Which would be consistent with a seizure due to eclampsia?

- a) there is status epilepticus
- b) no proteinuria or hypertension
- c) focal neurological signs
- d) it responds to benzodiazapines
- e) there is a persistently decreased conscious post seizure

6. Which is not a risk factor for an ectopic pregnancy?

- a) fertility treatment
- b) IUD in situ
- c) Endometriosis
- d) Previous tubal infection
- e) Family history

7. At what bHCG would the chance of an ectopic pregnancy be 90% if a transvaginal ultrasound showed an empty uterus?

- a) 500
- b) 900
- c) 1200
- d) 1600
- e) 2000

8. At what bHCG can you reliably see an intrauterine pregnancy with a transabdominal ultrasound?

- a) 4000
- b) 5000
- c) 5500
- d) 6500
- e) 7500

9. Which is incorrect with regards to ectopic pregnancy?

- a) incidence in the standard population is 20/1000
- b) the incidence of a heterotopic pregnancy in the standard population is 1:4000
- c) the presence of abdominal or pelvic pain is the most sensitive symptom or sign
- d) an intrauterine gestational sac can usually be seen at 5 weeks on a TV ultrasound and at 6 weeks on a transabdominal ultrasound
- e) the ectopic rate in subsequent pregnancies is 10%

10. Which is incorrect with regards to Rhesus isoimmunisation?

- a) The chance of a Rh-ve mother developing antiD antibodies to a Rh+ve fetus is less than 20% (even if not given antiD)
- b) Anti D must be given within 24 hours to have any substantial effect
- c) The risk of maternofetal transfusion is very small in a first trimester abortion and thus a smaller dose of anti D could be given
- d) The IgM anti D antibodies cannot cross the placenta but the IgG antibodies can
- e) It is a blood product.

11. Which is incorrect with regards to anti D?

- a) it is given IV
- b) The Kleihauer test is done to determine to quantify the fetomaternal hemorrhage and thus the amount of anti D required
- c) If the mother's serum has antiD antibodies detected in her serum at 24-48 hours after injection then the dosage is adequate
- d) If given from 3-10 days after fetomaternal transfusion it still has some effect
- e) 1ml protects against 6ml of fetal RBC's

12. With regards to the different categories of abortion which is incorrect?

- a) in an incomplete abortion the cervix may be open or closed
- b) in an inevitable abortion the cervix is open
- c) in a complete abortion the cervix is closed and bleeding and pain minimal
- d) in a threatened abort the cervix is open
- e) in a septic abortion the pt is characteristically febrile with PV bleeding and crampy pain

13. Which statement is incorrect?

- a) in the normal pregnancy the bHCG increases by 66% every two days
- b) the bHCG should plateau at when it reaches 1-2 million at 20 weeks gestation
- c) the current serum test can detect bHCG at 2-3 days post implantation
- d) a falling bHCG does not rule out the chance of rupture in an ectopic pregnancy
- e) approximately 50% of patients with a threatened abort will go on to complete the pregnancy

14. Which is not a true statement with regards to a normal pregnancy?

- a) the resting heart rate increases by 15-20 beats / min by the end of the third trimester
- b) the blood volume increases by 45%
- c) polycythaemia develops
- d) there is a leucocytosis up to 18 000
- e) the bladder becomes an abdominal organ

15. Which statement is incorrect with regards to radiation exposure to the fetus?

- a) the minimum exposure known to cause risk of the fetus is <0.1Gy (1000microGy)
- b) a CXR and Pelvic Xray are well below the minimum toxic level
- c) a VQ scan falls well below the toxic level
- d) a CT abdomen falls well below the toxic level
- e) a CXR has the same radiation as one transatlantic air flight

16. Which is not true with regards to placental abruption and trauma in pregnancy?

- a) it is the most common cause of death if the mother survives
- b) the incidence in minor trauma is up to 5% and up to 50% in major trauma
- c) it can occur up to 4 hours post accident
- d) CTG monitoring for a 4 hours is thought to predict nearly all pts of minor trauma who will develop placental abruption
- e) It is characterized by pelvic pain uterine contractions and vaginal bleeding

17. Which statement is incorrect with regards to dysfunctional uterine bleeding

- a) it is very rare in the teenage years
- b) it is usually due to anovulatory cycles
- c) oestrogen is used acutely to slow bleeding by contracting the uterine arteries
- d) cyclical progesterone is used if it is a chronic problem
- e) in patients over 35 years endometrial biopsy should precede oestrogen administration

18. Which three must be present to make the diagnosis of PID?

- a) temp  $>38.3$ , abdo pain, vaginal discharge
- b) temp  $> 38.3$ , abdominal pain, cervical excitation
- c) abdo pain, adnexal tenderness, increased CRP
- d) adnexal tenderness, vaginal discharge and increased CRP
- e) abdominal pain, cervical excitation and adnexal tenderness

19. Which agent is not one recommended in the 2000 antibiotic guidelines for the treatment of outpatient sexually acquired PID?

- a) Metronidazole 400mg b.d orally for 14 days
- b) ceftriaxone 250 mg IM stat dose
- c) augmenten duo forte 875/125 b.d orally for 14 days
- d) doxycycline 100mg b.d orally for 14 days
- e) roxithromycin 300mg o daily for 14 days if breast feeding

20. The risk of infertility after a single episode of PID is approximately?

- a) 5%
- b) 10%
- c) 20%
- d) 25%
- e) 35%

21. Non sexually acquired PID should be treated with doxycycline and what according to the 2000 Antibiotic Guidelines?

- a) metronidazole
- b) ciprofloxacin
- c) ceftriaxone
- d) augmented duo forte
- e) cephalixin

22. Which is an incorrect statement with regards to ovarian torsion?

- a) 70% of cases occur in women less than 30 years of age
- b) 20% of cases in women less than 30 are associated with pregnancy
- c) it has an increased incidence in women receiving ovarian stimulation treatment
- d) a tender mass is felt in 10% of cases
- e) when it occurs in post-menopausal women, neoplasm should be excluded

23. Which of the below is not consistent with trichomonas vaginitis?

- a) flagella are seen on a wet prep
- b) copious frothy grey green discharge
- c) a strawberry cervix on examination
- d) evidence of other sexually transmitted diseases
- e) treated with doxycycline

24. Which is not a risk factor for vaginal candidiasis?

- a) prepubertal
- b) diabetes
- c) immunosuppression
- d) pregnancy
- e) hormone replacement therapy

25. Which is not true with regard to bacterial vaginitis?

- a) it is the most common cause of vulvovaginitis in women of childbearing age
- b) clue cells are seen
- c) it can be a normal commensal
- d) it is not sexually transmitted
- e) treatment is with metronidazole

ANSWERS 1.E 2.B 3.C 4.D 5.D 6.E 7.C 8)D 9.E 10.B 11.A 12.D 13.B 14.C 15.D 16.C 17.A 18.E 19.C 20.B  
21.D 22.D 23.E 24.A 25.D



## EMQ

- A - Implantation bleeding
- B - Normal delivery
- C – Gestational diabetes
- D - Missed Abortion
- E - Threatened abortion
- F - Septic abortion
- G - Gestational Trophoblastic disease
- H - Heterotrophic pregnancy
- I - Multiple gestation
- J - Preeclampsia

1. The sensitizing event which causes the most number of maternal Rh isoimmunisations = A
2. Hypertension developing at at 12/40 = G
3. Passing frank blood at 9/40, closed os on exam = E
4. Scant PV bleeding at 5/40 with normal USS and exam = A
5. Vaginal spotting at 6/40 with non-tender uterine fundus and bHCG 85,000 mIU/mL = G

5. Which of the following is NOT a risk factor for ectopic pregnancy

- A - History of chlamydial cervicitis**
- B - Use of the mirena
- C - Previous ectopic pregnancy
- D - Assisted reproduction
- E - History of tubal surgery

6. Regarding ultrasound in early pregnancy. All of the following are true EXCEPT

A - An empty uterus with embryonic cardiac activity outside the uterus is seen in < 10% of ectopic pregnancies

B – The early sonographic signs of pregnancy (the gestational sac, yolk sac and fetal pole) can be visualized transabdominally 1 week later than transvaginally.

C – for transvaginal scanning, the discriminatory zone is 1500mIU/mL

D – in woman with no risk factors, when US reveals a definite intrauterine pregnancy and no other abnormalities, this effectively excludes ectopic pregnancy

**E – if ectopic pregnancy is suspected, US should not be performed if the bHCG is < 500mIU/mL as the result will invariably be negative.**

7. A 37 year old female who is 8/40 pregnant after undergoing assisted fertility presents with pelvic pain. Which of the following is TRUE.

A – If her serum bHCG is 2000mIU/mL then a transabdominal US would be expected to detect an intrauterine pregnancy

B – following an US demonstrating an IUP, ectopic pregnancy can be safely excluded

**C - Bimanual examination is contraindicated in ovarian hyperstimulation syndrome**

D – Because her in vitro fertilization was implanted directly onto the endometrium, an ectopic pregnancy can effectively be excluded

E – her age is not a recognized risk factor increasing the chance of ectopic pregnancy

1. In the management of a female sexual assault victim, the risk of her contracting Gonorrhoea is

a. <3%

b. 1%

c. 5-15%

**d. 4%**

2. A 30 yr old woman (G1P0) who is 28 weeks pregnant with a singleton, presents in premature labour having ruptured her membranes at home 30minutes previously. She is worried about her baby dying. What are the perinatal survival rates for a baby delivered at 28 weeks gestation?

a. 80%

- b. 75%
- c. 60%
- d. 40%

3. The incidence of an ectopic pregnancy post PID is

- a. 1:10
- b. 1:24
- c. 1:16
- d. 1: 8

### 1. Question

Re-organise the following items into the correct sequence to conduct a normal vaginal delivery

- Ensure adequate staff in attendance
- Provide analgesia
- Monitor fetal heart rate
- Perform vaginal examination if head not crowning
- Determine presenting part
- Determine degree of cervical dilation
- Deliver head by maintaining neck flexion
- Suction nose and mouth
- Deliver trunk, anterior shoulder first
- Clamp and cut cord 10 cm from baby
- Collect cord blood
- Check for undiagnosed twin
- Administer oxytocin 10 Units IV
- Deliver placenta
- Inspect placenta

The usual sequence for a normal vaginal delivery is:

prepare instruments and paediatric trolley  
 ensure adequate staff in attendance  
 provide analgesia  
 monitor fetal heart rate and strength and duration of contractions  
 position either in supine or lateral position  
 perform vaginal examination if head not crowning  
 determine presenting part  
 determine cervical dilation (1–10 cm) and effacement (thins to 1 mm)  
 perform episiotomy if required  
 deliver head by maintaining flexion  
 when head delivered, free cord from around neck  
 suction nose and mouth  
 deliver trunk, anterior shoulder first  
 clamp and cut cord 10 cm from baby  
 collect cord blood  
 check for undiagnosed twin  
 administer oxytocic agent, oxytocin 10 Units IV  
 deliver placenta

inspect placenta. ([link](#))

## 2. 2. Question

During labour, dilation of the cervix of < 7cm suggests that delivery is unlikely in the following

- 1. 4 hours
- 2. 1 hour
- 3. 10 minutes
- 4. 6 hours

2

During labour, dilation of the cervix of < 7cm suggests that delivery is unlikely in the following hour. ([link](#))

## 3. 3. Question

Select the 4 features of uterine contractions that are typical of the presence of true labour.

- 1. Occur at regular intervals becoming more frequent with time (e.g. every 10 min., 8 min, 5 min.)
- 2. Occur sporadically and without a predictable pattern
- 3. Start high in the abdomen and radiate across abdomen and lower back
- 4. Last 30 seconds at onset and get progressively longer
- 5. Are usually central abdominal or in the groin
- 6. Are unchanged by movement
- 7. May stop or slow with change of position
- 8. Vary in length and intensity

1,3,4,6

Features of **true labour** contractions are they:

Occur at regular intervals becoming more frequent with time (e.g. every 10 min., 8 min, 5 min.)

Last 30 seconds at onset and get progressively longer

Start high in the abdomen and radiate across abdomen and lower back

Are unchanged by movement

In **false labour** contractions:

Occur sporadically and without a predictable pattern

Vary in length and intensity

Are usually central abdominal or in the groin  
May stop or slow with change of position ([link](#))

### 1. Question

Regarding the maternal lung volume changes that occur in normal pregnancy, which one of the following statements is false

- 1. Tidal volume increases by approximately 40%
- 2. Dead space volume decreases due to contraction of the musculature of conducting airways
- 3. Total lung capacity is reduced by 5%
- 4. Functional residual capacity, residual volume, and expiratory reserve volume all increase by about 20%

4

Functional residual capacity, residual volume, and expiratory reserve volume all DECREASE by about 20%. ([link](#))

### 2. 2. Question

Regarding the maternal cardiovascular changes that occur in normal pregnancy, which one of the following statements is false

- 1. Uterine contractions cause a 15% increase in heart rate
- 2. Uterine contractions cause an increase in stroke volume
- 3. Uterine contractions cause a 25% increase in cardiac output
- 4. Uterine blood flow at term is approximately 500 mL/min

1

Uterine contractions cause a 15% DECREASE in heart rate, however, due to increased stroke volume of 35% due to increased venous return, maternal cardiac output increases during a uterine contraction. ([link](#))

### 3. 3. Question

Regarding circulating blood volume in pregnancy which one of the following statements is true

- 1. Increase in red blood cell mass is about 50%
- 2. Plasma volume increases later than red blood cell volume
- 3. The hematocrit falls until the end of the second trimester
- 4. Fetal hemoglobin synthesis is suppressed even when the mother is only mildly iron deficient

3

(link)

**4. 4. Question**

Which one of the following statements regarding normal pregnancy is false

- 1. Proteinuria changes little during pregnancy
- 2. There is resistance to the pressor effect of angiotensin II
- 3. Renin increases early in the first trimester
- 4. 600 mg/24 hr of protein is normally excreted

4

Urinary protein excretion is usually < 300mg/24 hours. Higher levels suggests renal disease.  
(link)

**5. 5. Question**

The normal average white blood cell count in the last trimester is

- 1. 8,000/ $\mu$ L
- 2. 4,000/ $\mu$ L
- 3. 2,000/ $\mu$ L
- 4. 15,000/ $\mu$ L

1

Marked elevations in WCC (25 – 30,000) can be seen in normal labour (link)

**6. 6. Question**

All of the following changes would be expected in a normal pregnancy **except**:

- 1. Increased ACTH
- 2. Increased human chorionic somatomammotropin (hCS)
- 3. Increased ADH
- 4. Decreased thyroid hormone.

4

**7. 7. Question**



Regarding metabolism in pregnancy, which one of the following is incorrect

- 1. Plasma cholesterol increases by 50%
- 2. There is impairment of renal tubular resorption of glucose.
- 3. There is relative insulin resistance
- 4. Glycosuria during pregnancy is always abnormal

4

Transient glycosuria is common and not always abnormal.(link)

### 8. 8. Question

Regarding blood volume changes in pregnancy, which of the following statements is true

- 1. Small women usually have a larger increase in blood volume than large women
- 2. Blood volume increases until 24 weeks then plateaus
- 3. The average increase in volume at term is 45-50%
- 4. Hypervolaemia begins in the second trimester

3

A small woman may have an increase in blood volume of only 20%, a large woman may have an increase of 100%. The increase in blood volume begins in the first trimester, increases rapidly in the second trimester and is relatively flat after 30 weeks (but progresses until term, unlike cardiac output). (link)

### 9. 9. Question

Regarding cardiac output in pregnancy, which one of the following is true

- 1. It is increased in late pregnancy due to increased stroke volume
- 2. It increases 60% during pregnancy
- 3. It reaches its maximum at 20-24 weeks' gestation
- 4. It is increased in early pregnancy due to increased heart rate

3

(link)

### 10. 10. Question

Which one of the following statements regarding maternal respiration during pregnancy and labour is incorrect

- 1. The rate at which the alveolar concentration of inhaled anaesthetic agents approaches inspired concentration is slow
- 2. Maternal oxygen consumption is increased by 10%
- 3. Alveolar ventilation is increased by 65%
- 4. Oxygen saturation decreases with each contraction and then returns to precontraction levels

2

Maternal oxygen consumption is increased by 20-40%, not 10%. (link)

#### 11. 11. Question

Regarding the cardiovascular changes that occur in normal pregnancy, which one of the following statements is false

- 1. Blood pressure declines slightly during pregnancy
- 2. Venous pressure in the upper body is unchanged
- 3. Diastolic pressure is reduced by 5-10 mm Hg from about 12-26 weeks
- 4. Diastolic pressure falls a further 5 mmHg after 26 weeks

4

(link)

#### 12. 12. Question

Normal haematological changes in pregnancy include all of the following except

- 1. Slight increase in basophil numbers
- 2. An increase in polymorphonuclear leukocytes
- 3. Decreased polymorphonuclear leukocyte adherence in the third trimester
- 4. A marked increase in fibrinogen

1

(link)

#### 13. 13. Question

All of the following changes would be expected in a normal pregnancy except:

- 1. A doubling of the serum alkaline phosphatase level

- 2. Slowing of gallbladder emptying time
- 3. Changes in the chemical composition of bile
- 4. Decreased plasma albumin concentration

3

The chemical composition of the bile remains unchanged. Biliary stasis is the primary cause of the increased risk of gallstone formation associated with pregnancy. (link)

#### 14. 14. Question

Regarding the cardiovascular changes that occur in normal pregnancy, which one of the following statements is false

- 1. Reversible ST, T, and Q wave changes can occur
- 2. The size of the heart increases by 10%
- 3. A third heart sound may be softer
- 4. A late systolic or ejection murmur is common late in pregnancy

3

(link)

#### 15. 15. Question

The average weight gain in pregnancy is approximately

- 1. 10kg
- 2. 12.5kg
- 3. 7.5kg
- 4. 15kg

2

(link)

#### 16. 16. Question

During delivery, the average total maternal blood loss is

- 1. 250 mL with vaginal delivery
- 2. 1000 mL with vaginal delivery
- 3. 500-600 mL with vaginal delivery

- 4. 1500 mL with cesarean section

3

**17. 17. Question**

All of the following changes would be expected in a normal pregnancy except:

- 1. Reduced gastrointestinal motility
- 2. Decreased salivation
- 3. Gum hypertrophy
- 4. Swallowing difficulty

2

Salivation increases during pregnancy. (link)

**18. 18. Question**

All of the following changes would be expected in a normal pregnancy except:

- 1. Increased volume of urine passed each day
- 2. Increase in renal plasma flow rate by 25-50%
- 3. Reduction in serum urea levels
- 4. Reduction in serum creatinine

1

The volume of urine passed each day is unchanged in pregnancy, despite increased in GFR, due to increased solute (and water) reabsorption.(link)

**19. 19. Question**

Regarding the maternal pulmonary changes that occur in normal pregnancy, which one of the following statements is true

- 1. The lower thoracic diameter decreases by 2 cm
- 2. There may be increased vascular lung markings on CXR
- 3. The diaphragm becomes less important for ventilation
- 4. Capillary constriction occurs throughout the respiratory tract

2

(link)

**20. 20. Question**

All of the following changes would be expected in a normal pregnancy except:

- 1. The right ureter more dilated than the left
- 2. An increase in the renal pelvis size to 10 mL
- 3. An increase in kidney length by 1cm
- 4. Increased urinary stasis

2

The renal pelvis does increase in size, but to 60mL NOT 10mL (which is normal size).  
The right ureter is more dilated than the left due to slight uterine rotation and compression.(link)

369. In performing an evaluation of a reproductive-age female rape victim, all of the following statements are true EXCEPT

- (A) it is not necessary to obtain vaginal washings if the rape occurred more than 24 hours before presentation since acid phosphatase and sperm can no longer be detected
- (B) antibiotics to prevent venereal disease should be administered
- (C) the patient should be offered pregnancy prophylaxis
- (D) a baseline pregnancy test must be obtained
- (E) the treating physician should consider testing the patient for syphilis and human immunodeficiency virus (HIV)

370. Indications for maternal transport to a tertiary perinatal center include all of the following EXCEPT

- (A) premature rupture of membranes
- (B) preterm labor with cervical dilatation to 6 cm
- (C) a blood pressure of 150/100 mm Hg and proteinuria
- (D) placental bleeding

(E) term labor in an insulin-dependent diabetic

371. Which of the following is true during an emergency delivery?

(A) A bimanual pelvic exam should be avoided because of the risk of placenta previa

(B) If fetal bradycardia develops, terbutaline or magnesium should be administered to relax uterine contractions

(C) Cervical cultures for group B Streptococcus and Neisseria Gonorrhoeae should be obtained if there has been no prenatal care

(D) It is best to artificially rupture membranes during preterm labor to assist the birth process

(E) It is not necessary to wait for full cervical dilatation before instructing the mother to push

372. Risk factors for ectopic pregnancy include all of the following EXCEPT

(A) pelvic inflammatory disease

(B) previous pelvic surgery

(C) tubal ligation

(D) induced abortions

(E) herpes simplex type II infections

373. A 30-year-old woman presents complaining of left-sided pelvic pain and vaginal bleeding. Her last menstrual period was 5 weeks ago and her pregnancy test is positive. Which of the following is true regarding the diagnosis of ectopic pregnancy?

(A) Failure of the quantitative b-HCG to double in 48 hours does not rule out an intrauterine pregnancy

(B) The likelihood of an ectopic pregnancy is less than 1:1000

(C) The finding of an adnexal mass confirms the diagnosis

(D) Pain usually develops after the onset of vaginal bleeding



(E) A negative ultrasound and culdocentesis rule out the diagnosis

374. Which of the following is true regarding the evaluation and management of a 27-year-old woman with pelvic pain whose last menstrual period was 6 weeks previously?

(A) A positive pregnancy test and an adnexal mass confirm the diagnosis of ectopic pregnancy

(B) Rupture of the corpus luteum in early pregnancy may cause a clinical picture indistinguishable from that of a ruptured ectopic pregnancy

(C) Rupture of a corpus luteum cyst with consequent hemoperitoneum is usually managed medically if the patient is pregnant

(D) Outpatient management of a suspected ruptured corpus luteum is acceptable

(E) Ruptured corpus luteum cysts are more common in pregnant than non-pregnant women

375. An 18-year-old sexually active woman presents with a shuffling gait, temperature of 39 °C, and lower abdominal tenderness. On pelvic examination, tenderness is present in both adnexa and with cervical motion. There is a suggestion of bilateral adnexal fullness. Purulent discharge is originating from the cervical os. She has a negative pregnancy test and a white blood cell count of 15,000. In addition to analgesia, what is the best treatment for this patient?

(A) Outpatient therapy with ceftriaxone and doxycycline

(B) Outpatient therapy with ofloxacin

(C) Inpatient therapy with cefotetan and doxycycline

(D) Inpatient therapy with clindamycin and doxycycline

(E) Inpatient therapy with gentamicin and doxycycline

376. Common etiologic agents for the process in question number 375 include all EXCEPT

(A) Escherichia coli

- (B) *Neisseria gonorrhoeae*
- (C) *Bacteroides* species
- (D) *Enterococcus*
- (E) *Chlamydia trachomatis*

377. A 33-year-old woman presents to the emergency department complaining of severe, acute pelvic pain. She has regular periods and her last menstrual period was 3 weeks ago. After confirming a negative pregnancy test, which of the following is the LEAST likely diagnosis?

- (A) Ovarian torsion
- (B) Torsion of a uterine fibroid
- (C) Rupture of an ovarian endometrioma
- (D) Ovarian rupture due to a cystadenoma
- (E) Rupture of a persistent corpus luteum cyst

378. All of the following regarding human immunodeficiency (HIV) infection and sexually active, heterosexual women are true EXCEPT

- (A) when considering sexual practices, patients should be counseled that penile-vaginal intercourse carries the highest risk of HIV transmission
- (B) AIDS cases in women from heterosexual contact now exceed cases attributable to injection drug use
- (C) invasive cervical cancer is now an AIDS indicator
- (D) zidovudine appears to be effective in reducing perinatal HIV transmission
- (E) women with HIV infection and pelvic inflammatory disease should be admitted to the hospital for IV antibiotics

379. To make the diagnosis of toxic shock syndrome, all of the following must be present EXCEPT

- (A) temperature > 38.9 °C (102 °F)

- (B) negative serologic tests for streptococcal infection
- (C) systolic blood pressure less than 90 mm Hg, syncope, or orthostatic drop in systolic blood pressure of 15 mm Hg
- (D) involvement of three of the following organ systems: gastrointestinal, musculoskeletal, renal, mucosal, hepatic, hematologic, or central nervous system
- (E) rash, especially of the palms and soles, with subsequent desquamation

380. Many anatomic and physiologic changes occur during pregnancy. These include all of the following EXCEPT

- (A) pituitary gland doubles in size by third trimester
- (B) tidal volume increases by 40%
- (C) systolic blood pressure remains at normal levels through the second trimester, then decreases about 15 mm Hg by the time of delivery
- (D) alkaline phosphatase levels increase to three to four times normal
- (E) pregnant patients can lose 30–35% of their blood volume before dropping their blood pressure

381. A 23-year-old RH– woman, 24 weeks pregnant, is involved in a motor vehicle accident and presents complaining of abdominal pain. All of the following actions are correct EXCEPT

- (A) increase the initial volume of fluid resuscitation by 50% over that used in non-pregnant patients
- (B) monitor uterine contractions as the risk of abruption increases to 20% if contractions continue to occur more than once every 10 minutes after 4 hours
- (C) consider peritoneal lavage or abdominal CT scan to evaluate abdominal injury
- (D) order a Kleihauer-Bedke test and give 300 µg of Rho(D) immune globulin (rhogam) if the test is positive
- (E) begin continuous electronic fetal heart monitoring; if unavailable, check the fetal heart rate every 10 minutes

382. Which of the following is true regarding penetrating abdominal trauma in pregnancy?

- (A) The most frequently injured organ from gunshot wounds is the small intestine
- (B) Abdominal exploration is not required if the gunshot wound involves only the uterus
- (C) All stab wounds of the lower abdomen should be explored
- (D) Patients appearing stable with stab wounds to the upper abdomen can be evaluated by lavage, cystogram, CT scan, or amniocentesis
- (E) Isolated lower abdominal stab wounds of the uterus can be managed expectantly in the absence of significant hemorrhage or signs of fetal distress

383. All of the following are characteristic of preeclampsia EXCEPT

- (A) less than 50% of the hypertension seen in pregnancy is due to preeclampsia
- (B) preeclampsia can be seen before the twentieth week of gestation if the patient has a hydatidiform mole
- (C) in patients with the HELLP syndrome, hypertension and edema need not be present to make the diagnosis of preeclampsia
- (D) women at risk include primigravidas and those under age 20
- (E) preeclampsia occurs in approximately 5–7% of all pregnancies

384. All of the following are indications for admission of a patient with preeclampsia EXCEPT

- (A) blood pressure greater than 160/110 mm Hg
- (B) a 3-lb weight gain in 1 week
- (C) poor access to care or a bad psychosocial situation
- (D) a creatinine greater than 2 mg/dl
- (E) presence of the HELLP syndrome

385. When treating a hypertensive pregnant woman as an outpatient, which drug or class of drugs is CONTRAINDICATED?

- (A) Methyldopa
- (B) Hydralazine
- (C) Angiotensin converting enzyme (ACE) inhibitors
- (D) Calcium channel-blockers
- (E) Metoprolol and atenolol if late in pregnancy

386. A 24-year-old, preeclamptic woman in her 32nd week of pregnancy is brought to the emergency department following a witnessed seizure at home. She has no previous history of seizures and, except for her preeclampsia, has no other medical problems. Her vital signs are BP = 180/120 mm Hg, HR = 110 bpm, T = 98.9 °F, R = 18/min. Edema of the hands and feet are noted. Reflexes are 3+ and symmetrical. Urine shows 1+ proteinuria. Treatment for this patient includes all of the following EXCEPT

- (A) magnesium sulfate
- (B) phenytoin
- (C) hydralazine
- (D) furosemide
- (E) immediate fetal delivery

387. When initially evaluating a patient with third-trimester vaginal bleeding, all of the following should be considered EXCEPT

- (A) degree of uterine firmness
- (B) presence or absence of pain
- (C) amount and type of vaginal bleeding
- (D) fetal heart rate
- (E) pelvic exam to determine the source of bleeding

388. A 36-year-old, G5P4 woman who is 34-weeks pregnant presents complaining of small amounts of vaginal bleeding. The blood is dark red in color and associated with significant constant pelvic pain. The uterus is firm and tender to palpation. Her BP = 90/60 mm Hg with a HR = 115 bpm. She has a platelet count of 150 K and a fibrinogen level of 200 mg/dl. The MOST likely diagnosis is

- (A) abruptio placentae
- (B) placenta previa
- (C) vasa previa
- (D) onset of labor
- (E) cervical polyp

389. In patients with third-trimester bleeding, ultrasound is useful for determining all of the following EXCEPT

- (A) presence of placenta previa
- (B) presence of abruptio placentae
- (C) fetal heart rate
- (D) fetal presentation
- (E) gestational age

369	A	370	B	371	C	372	E
374	B	375	C	376	D	377	E
378	A	379	B	380	C	381	D
382	E	383	A	384	B	385	C
386	D	387	E	388	A	389	B



# Obstetric and Gynecologic Emergencies

Each question below contains five suggested responses. Choose the ONE BEST response to each question.

**14-368** All of the following are TRUE of spontaneous abortion (SAB) EXCEPT

- (A) more than 50 percent of the abortuses have chromosomal abnormalities
- (B) most SABs occur before 8 or 9 weeks of gestation
- (C) maternal factors such as uterine adhesions and pelvic structural abnormalities may lead to SABs
- (D) the incidence of SAB climbs with increasing maternal age
- (E) the pain associated with SAB usually occurs after the bleeding has commenced

[Show Answer](#)

## Questions 369-370

**14-369** A 25-year-old female presents to the ED with right lower quadrant pain. Her last normal menstrual period was 26 days ago. She is expecting her menses to begin any day.

What is the first study you should order on this patient?

- (A) Urinalysis
- (B) Complete blood count (CBC)
- (C) Quantitative  $\beta$ hCG
- (D) Qualitative  $\beta$ hCG
- (E) Ultrasound

[Show Answer](#)

**14-370** With respect to the patient in question 369, which of the following is the LEAST likely etiology of the pain?

- (A) Ectopic pregnancy
- (B) Mittelschmerz
- (C) Ovarian torsion
- (D) Endometriosis
- (E) Appendicitis

[Show Answer](#)

**14-371** A 30-year-old pregnant female presents to the ED complaining of vaginal bleeding. All of the following statements are true concerning this patient EXCEPT

- (A) most patients with bleeding in early pregnancy have normal pregnancy outcomes
- (B) urinary tract infection can precipitate spontaneous abortion
- (C) lack of adnexal mass on bedside ultrasound makes ectopic unlikely
- (D) she should have her Rh status checked
- (E) the quantitative  $\beta$ hCG level should be monitored

[Show Answer](#)

**14-372** All of the following are true of intraperitoneal blood and culdocentesis EXCEPT

- (A) the test is positive when clotting blood is aspirated
- (B) cervical motion tenderness may be present in a patient with intraperitoneal blood
- (C) a ruptured corpus luteum cyst can produce a positive test
- (D) culdocentesis is positive in the majority of ectopic pregnancies, ruptured and unruptured
- (E) aspiration of clear fluid denotes a negative test

[Show Answer](#)

**14-373** All of the following are risk factors for pelvic inflammatory disease (PID) EXCEPT

- (A) multiple sexual partners
- (B) adolescence
- (C) history of gonococcal salpingitis
- (D) use of intrauterine (IUD) contraceptive device
- (E) low socioeconomic status

[Show Answer](#)

**14-374** All of the following regimens are recommended for the treatment of acute PID EXCEPT

- (A) ceftriaxone 125 mg intramuscularly plus doxycycline 100 mg orally twice a day for 10 to 14 days
- (B) cefoxitin 2 g intravenously every 6 h plus doxycycline 100 mg intravenously twice a day or orally for 10 to 14 days
- (C) cefoxitin 2 g intramuscularly plus probenecid 1 g orally and ofloxacin 400 mg orally twice a day for 14 days
- (D) clindamycin 900 mg intravenously every 8 h plus gentamycin loading dose of 2 mg/kg intravenously followed by a maintenance dose of 1.5 mg/kg every 8 h
- (E) cefotetan 2 g intravenously every 12 h plus doxycycline 100 mg intravenously twice a day or orally for 10 to 14 days

[Show Answer](#)

**14-375** All of the following are TRUE concerning vulvovaginitis EXCEPT

- (A) bacterial vaginosis is the most common etiology
- (B) alkaline cervical secretions predispose a woman to infection
- (C) older women usually do not have symptoms until the vulvovaginitis is advanced
- (D) pinworms (*Enterobius vermicularis*) can cause vaginal irritation
- (E) the classic "strawberry cervix" is commonly seen in patients with *Trichomonas vaginalis*

[Show Answer](#)

14-  
376

All of the following physiologic changes take place during normal pregnancy EXCEPT

- (A) respiratory rate is increased
- (B) blood volume increases
- (C) systolic blood pressure decreases
- (D) serum blood urea nitrogen (BUN) decreases
- (E) leukocyte count increases

[Show Answer](#)

14-  
377

All of the following statements concerning drugs in pregnancy are TRUE EXCEPT

- (A) with the exception of large molecules, virtually all drugs cross the placenta
- (B) category A drugs are safe during the first trimester of pregnancy
- (C) diuretics are not generally recommended in pregnancy
- (D) erythromycin estolate can be safely prescribed in pregnancy
- (E) cephalosporins can be used at any time during pregnancy

[Show Answer](#)

14-  
378

The MOST important factor in determining fetal risk from diagnostic imaging is the amount of ionizing radiation produced by the test. Rank the following radiation exposures from lowest to highest dose of radiation.

1. Head computed tomography (CT)
2. Posteroanterior and lateral chest x-ray
3. Lumbrosacral spine series (three films)
4. Abdominal CT
5. Intravenous pyelogram (IVP)

- (A) 2, 3, 1, 4, 5
- (B) 2, 1, 3, 5, 4
- (C) 3, 2, 1, 5, 4
- (D) 1, 4, 2, 3, 5
- (E) 2, 1, 5, 3, 4

[Show Answer](#)

**14-379** A woman in the third trimester of pregnancy presents to the ED complaining of abdominal pain without vaginal bleeding. Vital signs are remarkable for a systolic blood pressure of 160, heart rate of 105, and a respiratory rate of 18. Which one of the following statements is TRUE concerning this patient?

- (A) A normal ultrasound excludes the diagnosis of placental abruption
- (B) Lack of vaginal bleeding excludes the diagnosis of placental abruption
- (C) A pelvic examination should be avoided
- (D) A CBC, electrolytes, and renal and liver function tests (LFTs) should be obtained
- (E) Immediate delivery is indicated

[Show Answer](#)

**14-380** All of the following are TRUE of HELLP syndrome EXCEPT

- (A) the majority of women complain of right upper quadrant or epigastric pain with nausea and vomiting
- (B) platelet count is  $< 100,000/\text{mL}$
- (C) urinalysis is positive for protein
- (D) 10 percent calcium gluconate should be administered
- (E) hypertension is key to the diagnosis

[Show Answer](#)

**14-381** All of the following are TRUE of premature rupture of membranes (PROM) EXCEPT

- (A) the finding of a "ferning" pattern is diagnostic of amniotic fluid
- (B) nitrazine paper changes to dark blue
- (C) the pH of amniotic fluid is 4.5 to 6.0
- (D) 90 percent of term patients with PROM will go into labor within 24 h
- (E) infections can precipitate PROM

[Show Answer](#)

**14-382** All of the following are TRUE of infections during pregnancy EXCEPT

- (A) 40 percent of *Cytomegalovirus* infections are transmitted to the fetus
- (B) to be effective, *Varicella zoster* immune globulin should be given to seronegative women within 24 h of chicken pox exposure
- (C) erythema infectiosum exposure can cause SAB
- (D) infection with rubella in the first trimester is associated with congenital rubella syndrome
- (E) fetuses exposed to maternal toxoplasmosis have a 10 percent chance of contracting congenital toxoplasmosis

[Show Answer](#)

**14-383** All of following are TRUE of asthma in pregnancy EXCEPT

- (A) asthma worsens in about one-third of cases
- (B) oral steroids should not be prescribed
- (C)  $\beta$ -agonists are the mainstay of therapy
- (D) chest radiographs should be ordered for the same indications as for nonpregnant patients
- (E) pulmonary function tests are not significantly changed during pregnancy

[Show Answer](#)

**14-384** All of the following statements are TRUE of endometritis EXCEPT

- (A) the incidence is greater in patients who have had a cesarean section than in those who have had a spontaneous vaginal delivery
- (B) many infections are polymicrobial
- (C) when patients present with endometritis 48 h to 6 weeks after delivery, chlamydia and mycoplasma should be considered as primary etiologies
- (D) the speculum examination always reveals a purulent discharge
- (E) the clinical diagnosis is based on the symptoms of fever, malaise, lower abdominal pain, and foul-smelling lochia

[Show Answer](#)

**14-385** All of the following are TRUE of trauma in pregnancy EXCEPT

- (A) rapid deceleration may cause uterine rupture
- (B) pelvic fractures preclude a woman from having a vaginal delivery
- (C) life-threatening hemorrhage is most often localized to the retroperitoneum
- (D) splenic rupture, kidney injury, and liver laceration are the most common intraabdominal injuries
- (E) the Kleihauer-Betke assay is recommended

[Show Answer](#)

**14-386** To make the diagnosis of toxic shock syndrome, all of the following must be present EXCEPT

- (A) hypotension
- (B) temperature greater than 38.9°F
- (C) rash with subsequent desquamation
- (D) negative serologic test for streptococcal infection
- (E) involvement of three of the following organ systems: gastrointestinal, musculoskeletal, renal, mucosal, hepatic, hematologic, or central nervous system

[Show Answer](#)

**14-387** All of the following are indications for maternal transport to a tertiary perinatal center EXCEPT

- (A) placental bleeding
- (B) premature labor with cervical dilation to 6 cm
- (C) blood pressure of 160/110 mm Hg and proteinuria
- (D) premature rupture of membranes
- (E) term labor in a insulin-dependent diabetic

[Show Answer](#)

**14-388** When a gravid female presents in cardiac arrest, all of the following statements are TRUE EXCEPT

- (A) the "human wedge" is useful in bystander CPR
- (B) ideally, a Cardiff wedge should be placed under the patient's left hip and flank
- (C) manual displacement of the uterus off the inferior vena cava helps increase venous return
- (D) pregnant women are in an edematous state that can make intubation difficult
- (E) the use of a femoral line to deliver medications should be discouraged

[Show Answer](#)

**14-389** Any pregnant woman beyond 20 weeks of gestation who presents to the ED and appears to be actively contracting may need an emergent delivery. All of the following are TRUE of emergency delivery EXCEPT

- (A) inability to detect fetal heart tones does not rule out a viable pregnancy
- (B) amniotomy may result in prolapse of the umbilical cord
- (C) once the mother feels an urge to push, she should be encouraged to proceed
- (D) if the physician delivering the baby notices a "turtle sign," an assistant should apply suprapubic pressure
- (E) once the head is delivered, it is imperative to check for a nuchal cord (present in 25 percent of deliveries)

[Show Answer](#)

**14-390** Laparoscopy is being used more frequently to aid in the diagnosis of pelvic disease and to perform gynecologic surgeries. When a patient presents to the ED after one of these procedures, all of the following are TRUE EXCEPT

- (A) free air under the diaphragm is a normal finding 1 week after surgery
- (B) pelvic infections are uncommon after this procedure
- (C) a traumatic bowel injury is less problematic than a thermal injury
- (D) infection is an infrequent complication
- (E) patients with increasing abdominal pain after the procedure have perforated bowel until proven otherwise

[Show Answer](#)

**14-391** Which of the following statements is TRUE concerning genital herpes?

- (A) HSV-1 accounts for up to 50 percent of the cases of genital herpes
- (B) Systemic acyclovir decreases the frequency of recurrences
- (C) Systemic symptoms are common with the initial presentation of genital herpes
- (D) Tzanck smears are positive in the majority of cases
- (E) Cultures of fluid obtained from herpes vesicles are positive only a third of the time

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[Show All Answers](#)

**(368) The answer is C**

The etiologies of SAB can be divided into two categories: fetal and maternal. Fetal chromosomal abnormalities are the major cause of SAB. Maternal factors include uterine anomalies, incompetent cervix, progesterin deficiency, and chronic medical problems such as diabetes mellitus and thyroid disease. Although the majority of spontaneous abortions occur before the 8th or 9th week of gestation, they can occur up to the 20th week. The incidence of SAB rises with increased maternal and paternal age and with parity. Pain associated with abortion usually follows the commencement of vaginal bleeding and is typically midline and crampy. This is in contrast to ectopic pregnancy or ruptured cyst in which pain is typically acute, severe, and unilateral.

(Chapter 101)

**(369, 370) The answers are D and B, respectively**

Because of the life-threatening potential of ectopic pregnancy, it is critical to determine whether a woman with pelvic pain is pregnant. A qualitative test for the  $\beta$  subunit of human chorionic gonadotropin ( $\beta$ hCG) can be performed immediately at the bedside and thus is the first test indicated for any female patient of child-bearing age who is complaining of abdominal pain.

Ectopic pregnancy must be considered in every woman of child-bearing age who comes to the ED complaining of pain, even if she denies pregnancy. Ovarian torsion is uncommon, but when it occurs it causes unilateral pelvic pain. Endometriosis should be considered in any woman of reproductive age complaining of one or a combination of the following signs and symptoms: acute adnexal pain, premenstrual pelvic pain, worsening dysmenorrhea, and dyspareunia. Appendicitis is always in the differential of right lower quadrant pain. The key to the diagnosis of Mittelschmerz or "middle pain" is the fact that it occurs in mid-cycle, thus making it unlikely in this patient. A history of similar pain with each menstrual cycle may be elicited.

(Chapters 98, 100)

**(371) The answer is C**

The possibility of ectopic pregnancy must be considered in every patient who presents with abnormal uterine bleeding or pelvic pain. A focused bedside ultrasound is consistent with ectopic pregnancy if there is no identifiable gestational sac or intrauterine pregnancy visualized. Less commonly, an adnexal mass may be present, but the mass does not always represent an ectopic pregnancy. Rhesus (Rh) status should be assessed. Rh-negative women with antepartum bleeding must receive RhoGAM to prevent antibody formation that would endanger future pregnancies. Serial  $\beta$ hCG levels may be indicated in hemodynamically stable patients and should double in 48 h in a normal pregnancy. Urinalysis should be performed on patients with threatened abortion to rule out infection as a precipitant.

(Chapter 101)



**(372) The answer is A**

With the advent of bedside ultrasound, the use of culdocentesis has decreased. However, this simple test still has a role in the pregnant patient with signs and symptoms of ectopic pregnancy when ultrasound is not available. A needle is inserted into the cul de sac just inferior to the cervix. A culdocentesis is positive if nonclotting blood is obtained and negative if clear fluid is aspirated. Failure to aspirate blood is nondiagnostic and may represent technical problems. Culdocentesis is positive in the majority of patients with ectopic pregnancies, ruptured and unruptured (85 and 65 percent, respectively). A positive test is not specific for ectopic pregnancy but occurs with any process that produces blood in the pelvis.

(Chapter 100)

**(373) The answer is E**

PID occurs in women from all socioeconomic backgrounds. Risk factors for the development of PID include a history of gonococcal infection, sexual promiscuity, adolescence, and IUD use. Instrumentation of the uterus and tubes may predispose patients to the development of endometritis and salpingitis.

(Chapter 105)

**(374) The answer is A**

The Centers for Disease Control and Prevention publishes guidelines delineating several appropriate treatments for PID. The presence of penicillinase-producing gonorrhea dictates a careful choice of antibiotics. If ceftriaxone is used to treat outpatient PID, the dose is 250 mg intramuscularly as opposed to the dose of 125 mg intramuscularly for simple cervicitis.

(Chapter 105)

**(375) The answer is E**

The most common causes of vulvovaginitis include (1) infections with *Gardnerella*, *Candida albicans*, *Trichomonas*, and herpes simplex; (2) contact vulvovaginitis; (3) foreign bodies; and (4) atrophic vaginitis. Bacterial vaginosis is the most common form, followed by candidiasis. Whereas 80 percent of patients with *Trichomonas vaginalis* have diffuse erythema of the vaginal vault, only 2 percent present with a "strawberry cervix" (secondary to diffuse punctate hemorrhages). Normal acidic vaginal secretions help to limit infection. In older women, because of scant nerve endings in the vagina, symptoms of vulvovaginitis do not present until advanced disease is present. Young children may present with vaginal itching and irritation secondary to pinworms.

(Chapter 104)

**(376) The answer is A**

All organ systems are affected by the physiologic changes of pregnancy. Although tidal volume is increased and functional residual capacity is decreased, respiratory rate and vital capacity remain unchanged. The other changes listed are all seen with normal pregnancy.

(Chapter 99)

**(377) The answer is D**

Erythromycin base is safe to use in pregnancy, but erythromycin estolate should not be used because of drug-related hepatotoxicity. Other antibiotics considered safe in pregnancy include cephalosporins, nitrofurantoin, penicillin, and azithromycin. Heparin and insulin are large molecules that do not cross the placenta and are therefore safe in pregnancy.

(Chapters 99, 102)

**(378) The answer is B**

The most recent evidence suggests that 10 rad is the threshold for human teratogenesis and that the fetus is most vulnerable at 8 to 15 weeks of gestation. The position of the American College of Radiology is that there is no single test that results in radiation doses that threaten the well-being of the developing embryo or fetus. Radiation exposure is as follows: two-view chest radiograph with abdominal shielding, 0.00005 rad; head CT,  $\leq$  0.1 rad; lumbrosacral spine series, 0.168 to 0.359 rad; IVP, 0.686 to 1.398 rad; and abdominal CT, 5.0 rad.

(Chapters 99, 102)

**(379) The answer is D**

Etiologies of third-trimester abdominal pain include placental abruption, labor contractions, hypertension with hemolysis, elevated liver enzyme and low platelet (HELLP) syndrome, appendicitis, and rarely placenta previa from uterine irritation. Classically, placental abruption presents with vaginal bleeding; however, when the separation is central, bleeding is concealed. Ultrasound does not detect all abruptions. A speculum examination is safe and appropriate in the management of this patient. Digital examinations are contraindicated when the diagnosis of placenta previa is being considered. Immediate delivery is indicated if the patient is eclamptic or the fetus is in danger for another reason. CBC, electrolytes, BUN, creatinine, LFTs, and a urinalysis may help detect an infection, HELLP syndrome, or hemorrhage.

(Chapter 101)

**(380) The answer is D**

Preeclampsia (pregnancy-induced hypertension) occurs in about 7 percent of all pregnancies. It can present with a wide variety of symptoms. The classic triad is hypertension, proteinuria, and edema. The HELLP (hemolysis, elevated liver enzymes, and low platelets) syndrome represents an unusual presentation of this disease. Magnesium sulfate is indicated for seizure prophylaxis in patients with severe preeclampsia. Calcium gluconate is the antidote for magnesium toxicity. Obstetrical management is based on the degree of preeclampsia and the gestational age of the fetus; if term or near term, delivery is indicated.

(Chapter 101)

**(381) The answer is C**

Premature rupture of membranes is defined as the rupture of membranes before the onset of labor. The cause of PROM is not well understood, but there is strong evidence that inflammation from infections affecting the membranes is a precipitant. The diagnosis of PROM is made by a combination of history and physical examination. Speculum examination should be performed to look for vaginal fluid pooling in the posterior fornix. Normal vaginal fluid pH is 4.5 to 6.0; amniotic fluid has a pH of 7.1 to 7.3. Nitrazine paper turns dark blue in the presence of amniotic fluid. If vaginal fluid is placed on a slide and allowed to dry, a "ferning" pattern is diagnostic for amniotic fluid.

(Chapter 103)

**(382) The answer is B**

The TORCH infections can cause perinatal morbidity and mortality: T, toxoplasmosis; O, "other" such as human parvovirus (B19), hepatitis B infection, and syphilis; R, rubella; C, chicken pox or varicella infection; and H, herpes simplex. All have serious effects on fetuses. Patients exposed to varicella or hepatitis B who do not have adequate protective titers need immune globulin. For varicella, the immune globulin should be administered within 96 h of exposure.

(Chapter 150)

**(383) The answer is B**

Inhaled  $\beta$  agonists are the cornerstone of therapy. Steroids should be added in moderate and severe exacerbations, either inhaled or orally. Concomitant respiratory infections should always be considered and a

chest radiograph ordered if management would be changed based on the results. Adequate oxygenation of the mother is the key to a healthy fetus.

(Chapter 102)

**(384) The answer is D**

Patients with postpartum endometritis complain of lower abdominal pain, fever, and foul-smelling discharge. The speculum examination often shows a purulent discharge but only scant discharge may be present, especially in patients with group A  $\beta$ -hemolytic streptococci. Cervical cultures should be obtained in all patients. Although many infections are polymicrobial, within the first 48 h postpartum, group A and B *Streptococcus*, *Staphylococcus*, and *Clostridium* should be considered as primary etiologies. Infections that present later are more commonly caused by chlamydia and mycoplasma.

(Chapter 101)

**(385) The answer is B**

Pelvic deformity may interfere with the normal passage of the fetus through the pelvic inlet during labor and delivery, but cesarean section is only necessary 5 to 10 percent of the time after pelvic fracture. The Kleihauer-Betke test of maternal blood is used to detect fetal cells in the maternal circulation. Although it is difficult to perform and often unavailable in emergency situations, it should be ordered to detect the rare large fetal transfusions that require specific fetal blood therapy.

(Chapter 246)

**(386) The answer is D**

Fever, hypotension, multiorgan involvement, and rash must be present to make the diagnosis of toxic shock syndrome. In addition, negative serologies for measles, leptospirosis, mononucleosis, and Rocky Mountain spotted fever are required. Negative serologic studies for streptococcal infection play no part in the diagnosis. In fact, streptococcal infections have been implicated as an etiology of the syndrome.

(Chapter 138)

**(387) The answer is B**

The transferring physician must abide by federal regulations outlined in the Emergency Medical Treatment and

Active Labor Act when arranging a transfer. The most common indications for maternal transport to a tertiary perinatal facility (higher level of care) are premature rupture of membranes and preterm labor. Other reasons to initiate transport include preeclampsia, placental bleeding, and diabetes mellitus. If the patient is in active labor (having contractions and dilated to 6 cm or more), any transport is contraindicated and the physician attending the patient should prepare for immediate delivery.

(Chapter 101)

**(388) The answer is B**

Several physiologic changes of pregnancy must be considered during cardiopulmonary resuscitation (CPR). Mucosal engorgement and increased friability make the pregnant patient's airway more likely to bleed and swell during intubation. The enlarged uterus compresses the inferior vena cava when the woman is supine during CPR. The gravid uterus should be displaced off the inferior vena cava to the right by using the "human wedge," Cardiff wedge, a roll, or manual displacement. Infradiaphragmatic vessels are suboptimal for medication administration secondary to poor venous return.

(Chapter 12)

**(389) The answer is C**

In the setting of emergency delivery, bimanual pelvic examination should be performed unless placenta previa is suspected. The cervix should be checked for dilation, effacement, and presenting part. If the mother pushes before the cervix is 100 percent effaced, a serious laceration may occur. Amniotomy is not appropriate in the ED because it may result in prolapse of the cord if the baby's head is not engaged. Nuchal cords and shoulder dystocia are problems that may arise during delivery. The "turtle sign" (fetal head pulled tight into the perineum) indicates shoulder dystocia. After a generous episiotomy is performed and the bladder is emptied, suprapubic pressure should be applied by an assistant to aid delivery of the shoulders.

(Chapter 103)

**(390) The answer is A**

Major complications associated with laparoscopy are (1) thermal injuries to the bowel; (2) bleeding; (3) rarely, ureteral, bladder, and large bowel injury; and (4) infections or abscess formation. Traumatic injury to the bowel is generally less worrisome than thermal injury from the instruments used during the procedure. Typically when bowel trauma occurs, it is the result of a small-diameter needle and is recognized when the needle is withdrawn. Peritonitis rarely develops after this complication. Perforated viscus must be ruled out in patients with persistent or increasing abdominal pain. Air insufflated during the procedure should be absorbed within 3 days.

(Chapter 108)

**(391) The answer is C**

Genital herpes is a sexually transmitted disease caused by a DNA virus specific to humans. There are two antigenic types of herpes simplex virus (HSV), denoted HSV-1 and HSV-2. The overwhelming majority of genital infections are caused by HSV-2. In the past HSV-1 was thought to cause only oral infections, but it is now known to be responsible for up to 30 percent of the genital infections. The initial presentation of herpes occurs 1 to 45 days after exposure and is usually accompanied by constitutional symptoms such as fever, malaise, and headache. Some people have asymptomatic infections, defined as culture-positive viral shedding in the absence of symptoms or lesions. Tzanck smears identify multinucleated giant cells in up to 50 percent of cases. Cultures are positive 85 to 95 percent of the time. Acyclovir provides partial control of the signs and symptoms and accelerates healing of the lesions. This antiviral medication does not affect the frequency or severity of recurrences.

(Chapter 104)