

OBSTETRICS AND GYNECOLOGY

1. A 57-year-old woman comes to the physician 1 week after noticing a mass in her left breast during breast self examination. Menopause occurred 4 years ago. She was receiving estrogen replacement therapy but discontinued it 1 year ago; she has had no menopausal symptoms. There is no family history of breast cancer. Examination shows a 2-cm, palpable, nontender, mobile mass in the upper outer quadrant of the left breast; no nipple discharge can be expressed. Examination of the right breast shows no abnormalities. Which of the following is the most appropriate next step in management?

- (A) Reexamination in 3 months
- (B) Mammography
- (C) CT scan of the chest
- (D) Ductal lavage
- (E) Mastectomy

2. A 27-year-old nulligravid woman has had severe pain with menses that has caused her to miss at least 2 days of work during each menstrual cycle for the past year. She has occasional pain during sexual intercourse. She weighs 50 kg (110 lb) and is 160 cm (5 ft 3 in) tall; BMI is 20 kg/m². Pelvic examination shows a normal-appearing vulva and vagina. The cervix is pink with minimal endocervical gland eversion. The uterus is normal in size. The left ovary is 2 x 3 cm; the right is 4 x 6 cm. Which of the following is the most likely cause of her condition?

- (A) Chronic appendicitis
- (B) Endometriosis
- (C) Pelvic congestion syndrome
- (D) Polycystic ovarian syndrome
- (E) Premenstrual syndrome

3. A 22-year-old woman comes to the physician because of a 2-day history of pain with urination, intense vaginal itching, and a thick discharge. She has no history of serious illness. She is sexually active and uses an oral contraceptive. Her temperature is 37°C (98.6°F). Abdominal examination shows no abnormalities. Genitourinary examination shows erythema of the vulva and vagina with an odorless curd-like discharge. The cervix appears normal. Bimanual examination shows no abnormalities. The pH of the vaginal discharge is 4. Wet mount preparations of the discharge with saline and with KOH are obtained. The saline slide shows mature squamous epithelial cells, and the KOH slide shows multiple budding yeasts with pseudohyphae. Which of the following is the most likely diagnosis?

- (A) Bacterial vaginosis
- (B) Candidiasis
- (C) *Chlamydia trachomatis* infection
- (D) Lichen sclerosus
- (E) Scabies
- (F) Trichomoniasis

4. A 27-year-old nulligravid woman and her husband have been unable to conceive for 12 months. She has never used contraception. Menses occur at 28-day intervals, and her last menstrual period was 2 weeks ago. She had a single episode of pelvic inflammatory disease 4 years ago and was treated with oral antibiotics. Vaginal examination shows no abnormalities. Cervical cultures are normal. Which of the following is the most appropriate next step in diagnosis?

- (A) Reevaluation in 6 months
- (B) Ultrasonography of the abdomen
- (C) Sperm penetration assay
- (D) Hysterosalpingography
- (E) Endometrial biopsy

5. A 30-year-old woman, gravida 2, para 1, comes for her first prenatal visit at 26 weeks' gestation. Uterine size is greater than expected for dates. Ultrasonography shows fetal hydrops. Which of the following is the most appropriate next step in diagnosis?

- (A) Maternal HIV antibody test
- (B) Maternal Rh status with antibody screening
- (C) Cervical and urine cultures for group B streptococcus
- (D) MRI of the fetus
- (E) Amniocentesis for measurement of α -fetoprotein Concentration

6. A 42-year-old woman, gravida 2, para 2, comes to the physician because of increasingly frequent loss of urine during the past year. She has loss of urine when she coughs, sneezes, exercises, or plays with her children. Her incontinence is never preceded by a sudden urge to void, and she does not have loss of urine at night. Her children were born after uncomplicated vaginal deliveries. She has no history of other hospital admissions or serious illness. She takes no medications. Abdominal examination shows no abnormalities. The external genitalia, vagina, and cervix appear normal. The uterus and adnexa are normal to palpation. There is loss of a small amount of urine with Valsalva maneuver. Her postvoid residual volume is 50 mL. Urinalysis shows no abnormalities. Which of the following is the most likely diagnosis?

- (A) Overactive bladder with incontinence
- (B) Overflow incontinence
- (C) Stress incontinence
- (D) Urinary tract infection
- (E) Vesicovaginal fistula

7. During a routine examination, a 25-year-old woman expresses concern about her risk for ovarian cancer because her mother died of the disease. Which of the following is the most appropriate course of action?

- (A) Reassure her that ovarian cancer is not hereditary
- (B) Obtain a more detailed family history of cancer
- (C) Recommend a diet high in beta-carotene
- (D) Annual CT scans of the abdomen
- (E) Prophylactic oophorectomy

8. At her 6-week postpartum visit, an 18 year-old woman, gravida 1, para 1, tells her physician that she has a pinkish vaginal discharge that has persisted since her delivery, although it is decreasing in amount. On physical examination, the uterus is fully involuted and there are no adnexal masses. Which of the following is the most appropriate next step in management?

- (A) Reassurance that this is normal
- (B) Measurement of serum prolactin concentration
- (C) Quantitative β -hCG test
- (D) Administration of ampicillin
- (E) Dilatation and curettage

9. A 32-year-old nulligravid woman comes to the physician because of a 6-week history of persistent foul-smelling vaginal discharge and vaginal itching. Her symptoms have not improved despite 2 weeks of treatment with over-the-counter antifungal medications and fluconazole. She has been sexually active and monogamous with her boyfriend during the past year, and they use condoms consistently. Examination shows excoriated labia and erythematous vaginal mucosa. There is a frothy, watery-gray discharge in the posterior vaginal vault. A wet mount preparation of the discharge shows numerous multi-flagellated organisms the size of erythrocytes. Which of the following is the most likely causal organism?

- (A) *Haemophilus ducreyi*
- (B) *Neisseria gonorrhoeae*
- (C) *Pseudomonas aeruginosa*
- (D) *Treponema pallidum*
- (E) *Trichomonas vaginalis*

10. An asymptomatic 24-year-old primigravid woman at 36 weeks= gestation comes for a routine prenatal visit. A grade 2/6, systolic ejection murmur is heard at the left upper sternal border. The S2 varies with inspiration, and the pulmonary component is soft; diastole is clear. Which of the following is the most likely diagnosis?

- (A) Anomalous pulmonary venous return
- (B) Atrial septal defect
- (C) Flow murmur
- (D) Patent ductus arteriosus
- (E) Pulmonary valve stenosis

11. A 42-year-old woman, gravida 3, para 3, comes to the physician because she has not had a menstrual period for 2 months. She reports that she had an episode of spotting 3 weeks ago. She has had no other symptoms. She has no history of abnormal Pap smears; her last Pap smear was 10 months ago. She is sexually active with her husband and uses condoms. She is 163 cm (5 ft 4 in) tall and weighs 72 kg (160 lb); BMI is 28 kg/m². On physical examination, the abdomen is nontender to palpation. Pelvic examination shows a slightly enlarged uterus; there are no palpable adnexal masses. Which of the following is the most appropriate next step in management?

- (A) Measurement of serum β -hCG concentration
- (B) Measurement of serum thyroid-stimulating hormone concentration
- (C) CT scan of the pelvis
- (D) Oral contraceptive therapy
- (E) Endometrial biopsy

12. A 57-year-old woman comes to the physician for a routine health maintenance examination. She takes a multivitamin supplement and calcium (500 mg/d). She has followed a vegan diet for 30 years. She exercises daily for 30 minutes. She does not smoke cigarettes or drink alcohol. There is a family history of osteoporosis. She is 168 cm (5 ft 6 in) tall and weighs 60 kg (132 lb); BMI is 21 kg/m². Examination shows no abnormalities. Bone densitometry shows evidence of low bone density. She prefers not to be treated with medications. The physician recommends that the patient increase her daily dose of the calcium supplement. The most appropriate next step in management is supplementation with which of the following?

- (A) Fish oil
- (B) Magnesium
- (C) Vitamin C
- (D) Vitamin D
- (E) Zinc

13. A 2778-g (6-lb 2-oz) male newborn is born at 37 weeks' gestation to a 27-year-old woman, gravida 3, para 2, after an uncomplicated labor and delivery. The mother has no medical insurance and did not receive prenatal care. She says she did not have any health problems during pregnancy, but she continued to consume two bottles of beer weekly during her pregnancy. She does not take any medications, vitamins, or herbal supplements. Her diet consists mostly of rice and beans. Examination of the newborn shows spina bifida. Which of the following measures during the mother's pregnancy is most likely to have prevented this child's deformity?

- (A) Abstinence from alcohol
- (B) Increase dietary intake of omega-3 fatty acids
- (C) Glucose tolerance test
- (D) Screening for group B streptococcal infection
- (E) TORCH titer screening
- (F) Folic acid supplementation

14. Two hours after vaginal delivery at term of a 3062-g (6-lb 12-oz) newborn, a 32-year-old woman, gravida 3, para 3, has the onset of heavy vaginal bleeding. Labor was augmented with oxytocin because of a prolonged first stage and required forceps delivery over a midline second-degree episiotomy. The abdomen is soft and nontender. Examination shows a boggy uterus palpated 4 cm above the umbilicus. The perineum is intact. Which of the following is the most likely cause of this patient's hemorrhage?

- (A) Disseminated intravascular coagulation
- (B) Episiotomy site bleeding
- (C) Uterine atony
- (D) Uterine infection
- (E) Uterine rupture

15. A 19-year-old primigravid woman at 8 weeks' gestation is brought to the emergency department because of light vaginal bleeding and mild lower abdominal cramps during the past 8 hours. Her temperature is 37°C (98.6°F), pulse is 84/min, respirations are 18/min, and blood pressure is 110/70 mm Hg. Abdominal examination shows no tenderness or masses; bowel sounds are normal. On pelvic examination, there is old blood in the vaginal vault and at the closed cervical os. The uterus is consistent in size with a 6- to 8-week gestation. Transvaginal ultrasonography shows an intrauterine pregnancy. A fetal heartbeat is seen. Which of the following is the most appropriate next step in management?

- (A) Discharge home for observation
- (B) Oral administration of misoprostol
- (C) Intramuscular administration of methotrexate
- (D) Operative laparoscopy
- (E) Dilatation and curettage

16. A 16-year-old girl is brought to the emergency department 6 hours after the onset of moderate lower abdominal cramps and intermittent nausea. She has not vomited during this time. She says that her last menstrual period was 2 months ago, but she has had intermittent bleeding since then, including spotting for the past 2 days. Menarche was at the age of 15 years. Menses occur at irregular 25- to 45-day intervals. She is sexually active and uses condoms inconsistently. Her temperature is 38.1°C (100.6°F), pulse is 94/min, respirations are 22/min, and blood pressure is 120/80 mm Hg. Examination shows a soft abdomen with lower quadrant tenderness, especially on the right. Bowel sounds are normal. Pelvic examination shows scant vaginal bleeding and a palpable, tender right adnexal mass. The cervix appears normal. There is no cervical motion tenderness. Which of the following is the most appropriate next step in management?

- (A) Complete blood count
- (B) Measurement of serum β -hCG concentration
- (C) Abdominal x-ray
- (D) Ceftriaxone and azithromycin therapy
- (E) Exploratory laparoscopy

17. A 13-year-old girl is brought to the physician because of a 1-year history of intermittent irregular vaginal bleeding; the bleeding ranges from spotting to heavier than a normal menstrual period, occurs every 2 to 8 weeks, and lasts 10 to 30 days. Examination shows a pink, well-rugated vagina with no discharge; the cervix appears normal. The uterus is 6 cm in length, regular in contour, and nontender. There are palpable, normal-sized, nontender ovaries. Which of the following is the most appropriate pharmacotherapy to alleviate this patient's symptoms?

- (A) Continuous low-dose estrogen
- (B) Gonadotropin-releasing hormone agonist
- (C) Oral contraceptives
- (D) Tetracycline
- (E) Thyroid hormone

18. A previously healthy 25-year-old woman, gravida 2, para 2, comes to the emergency department because of a 3-day history of painful swelling of her vaginal area. Her last menstrual period was 2 months ago. She is sexually active with one male partner and uses depot medroxyprogesterone for contraception. Her temperature is 38.4°C (101.2°F), pulse is 96/min, respirations are 16/min, and blood pressure is 125/82 mm Hg. Examination shows a 4-cm, exquisitely tender mass in the inferior aspect of the left labium minus. The swelling and tenderness prevent insertion of either a speculum or fingers into the vagina. Which of the following is the most

likely diagnosis?

- (A) Bartholin gland abscess
- (B) Chancroid
- (C) Condylomata acuminata
- (D) Herpes simplex
- (E) Lymphogranuloma venereum
- (F) Primary syphilis

19. A 22-year-old primigravid woman at 34 weeks' gestation is brought to the emergency department by ambulance after being found unconscious by her husband. Paramedics report that she was having tonic-clonic movements that have now stopped. Her last visit to the physician was 2 weeks ago. Pregnancy had been uncomplicated. On arrival, she is awake, lethargic, and mildly confused. She says that she had a headache and did not feel well earlier in the day. She has no history of serious illness. Her only medication is a prenatal vitamin. Her temperature is 37°C (98.6°F), pulse is 80/min, respirations are 18/min, and blood pressure is 170/110 mm Hg. Examination shows a nontender, soft uterus consistent in size with a 34-week gestation. Cranial nerves are intact. Motor function is normal. Deep tendon reflexes are 3+. Which of the following is the most likely diagnosis?

- (A) Absence seizures
- (B) Cerebral infarction
- (C) Eclampsia
- (D) Migraine
- (E) Pheochromocytoma

20. A 15-year-old girl is brought to the physician by her mother because she believes that her daughter has become sexually active and wants her to use contraception. During an interview with the patient alone, she reports that she has become sexually active with one male partner over the past 3 months. She and her partner use condoms consistently, and she is not interested in any other form of contraception at this time. Menarche was at the age of 12 years, and menses occur at regular 28-day intervals. She has had no symptoms of sexually transmitted diseases. Examination shows no abnormalities. In addition to counseling the patient about all contraceptive methods, which of the following is the most appropriate next step?

- (A) Do not inform the mother that her daughter and her partner use condoms, but encourage the daughter to communicate the information
- (B) Inform the mother that her daughter and her partner use condoms
- (C) Inform the mother that her daughter is protecting herself appropriately against pregnancy, but do not mention what form of contraception
- (D) Inform the mother that you have administered depot medroxyprogesterone to the patient
- (E) Inform the mother that you have given the patient a prescription for an oral contraceptive

Answer Form for Obstetrics and Gynecology Sample Questions

(Questions 1-20)

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